Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start		Rating **	Α	Issue No.		1		
LM End		Issue Type +	Ma	Location *				
Category	Earthen L	evee		GPS La	atitude/	Longitude		
Calegory				Start		End		
Item		s & Maintena	nce		0		0	
пеш	Manuals				0		0	
DWR ID DWR_MA0013_01_s _ 2013_1								
		Comn	nent Cod	de				
		Inspecto	or Comm	nent				
The LMA has the O&M manuals.								

No Photos

LM Start		Rating **	Α	Issue No.		8	
LM End		Issue Type +	Ma	Location *			
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item		y Supplies &			٥		0
пеш	Equipmen	nt			٥		0
DWR ID	DWR_MA0	013_01_s _ 201	13_8				
		Comn	nent Cod	de			
		Inspect	or Comm	nent			
The LMA h	nas adequa	ate flood fight	supplies	and equip	men	t.	

No Photos

LM Start		Rating **	Α	Issue No.		16	
LM End		Issue Type +	Ма	Location *			
Category	Earthen L	evee		GPS La	atituc	le/Longitude	
Calegory				Start		End	
Item	Flood Pre	paredness &	Training		0		0
пеш	0						0
DWR ID	DWR ID DWR_MA0013_01_s _ 2013_16						
		Comn	nent Cod	le			
		Inspecto	or Comm	ent			
The LMA o	completed	flood fight trai	ning in 2	018.			

No Photos

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	1.13	.13 Rating ** A/W		Issue No.		92
LM End	1.13	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS La	atitud	le/Longitude
Calegory			Start		End	
Item	DWR UCI	P LMA Respo	onsibility	39.5821	47°	39.582147°
пеш					40°	-121.700540°
DWR ID	16343					

Inspector Comment

Comment Code

FS ID:52180 DS_ID:16343 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

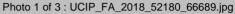
AFreitag)4/28/2016 Crossing appears to be in good condition.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last

inspection.12/2/2013 Same as last inspection.7/10/2013 Same as last inspection.4/17/2012 Drain is still in use. 4 inch pipe in channel near WS headwall (see photo). The pipe does not appear to impact the crossing

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS). Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.15)]

FS Date: 6/16/2017 10:11:43 AM

LM Start	1.13	Rating **	A/W	Issue No.	92 (cont)
LM End	1.13	Issue Type +	Ма	Location *	





Overview of levee crown at crossing looking D/S.

Photo 2 of 3: UCIP_FA_2018_52180_66688.jpg



View of WS headwall and flap gate.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	1.13	Rating **	A/W	Issue No.		92 (cont)
LM End	1.13	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.5821	47 °	39.582147°
пеш				-121.7005	40 °	-121.700540 °
DWR ID	16343					

Inspector Comment

Comment Code

FS_ID:52180 DS_ID:16343 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good condition.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last

inspection.12/2/2013 Same as last inspection.7/10/2013 Same as last inspection.4/17/2012 Drain is still in use. 4 inch pipe in channel near WS headwall (see photo). The pipe does not appear to impact the crossing.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS). Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento

O&M Manual 519, June 1962 (HLM 1.15)] FS Date: 6/16/2017 10:11:43 AM Photo 3 of 3: UCIP_FA_2018_52180_66687.jpg



View of WS with pipe in channel.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	1.59	Rating **	М	Issue No.		93	
LM End	1.59	Issue Type +	Ma	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.5768	83°	39.576883°	
пеш				-121.7027	70°	-121.702770 °	
DWR ID	WR ID 16831						
	Comment Code						

Inspector Comment

FS_ID:52938 DS_ID:16831 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 8/23/2018 1:54:26 PM

UCIP Comments: 8/23/2018 Same as last inspection; still no sign of WS pipe end. Unclear if this SD crossing is still in use. The WS toe has standing, mucky, water around where the pipe end should be Downgrading to Non-Urgent from Urgent because there appears no immediate threat to levee. Recommend follow up with owner to determine pipe use, and an internal pipe inspection to determine pipe integrity and threat to levee (D. Sanoski - DWR UCIP).6/14/2017 Still no sign of WS pipe end. Pipe may need to be traced with GPR and excavated to determine if the WS end was properly capped after the Headwall and pipe sections were removed. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS structures still removed. (DWR Sutter Yard- AFreitag) 10/17/2016 Landowner removed WS concrete headwall and pipe section through floodway to make room for orchard. The area disturbed appears to be from WS toe to where the mature trees are located within floodway, approximately 45 feet from WS toe. Crossing is classified as Urgent with potential levee integrity issues due to the disturbance of the WS without prior approval from the CVFPB. (DWR UCIP - omagana)

4/28/2016 Landowner appears to have removed the WS headwall and pipe to make room for planting more orchard trees. LS pipe end was full of water as it has no where to drain to anymore. Changing to urgent listing but it currently does not affect the levee integrity. (see photos 8, 9, & 10) (DWR Sutter Yard - afreitag)7/14/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition. (DWR Sutter Yard - afreitag) 4/17/2012 Pipe collapse on WS 10 feet from toe, needs repair. From WS, sediment is visible inside pipe. (DWR UCIP - omagana) FIELD STRUCT DESC: 36-inch corrugated metal drainage pipe through the levee, 7.8 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Slide gate in corrugated metal pipe (CMP) riser on the WS slope. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.62)]

Photo 1 of 3: UCIP_FA_2018_52938_66695.jpg



Overview of levee crown at crossing looking downstream.

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Flood Control Project Maintenance Levee Inspections

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	1.59	Rating **	М	Issue No.		93 (cont)	
LM End	1.59	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.57688	3°	39.576883°	
пеш				-121.70277	o°	-121.702770 °	
DWR ID	16831						

Inspector Comment

Comment Code

FS_ID:52938 DS_ID:16831 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 8/23/2018 1:54:26 PM

UCIP Comments: 8/23/2018 Same as last inspection; still no sign of WS pipe end. Unclear if this SD crossing is still in use. The WS toe has standing, mucky, water around where the pipe end should be Downgrading to Non-Urgent from Urgent because there appears no immediate threat to levee. Recommend follow up with owner to determine pipe use, and an internal pipe inspection to determine pipe integrity and threat to levee (D. Sanoski - DWR UCIP).6/14/2017 Still no sign of WS pipe end. Pipe may need to be traced with GPR and excavated to determine if the WS end was properly capped after the Headwall and pipe sections were removed. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS structures still removed. (DWR Sutter Yard- AFreitag) 10/17/2016 Landowner removed WS concrete headwall and pipe section through floodway to make room for orchard. The area disturbed appears to be from WS toe to where the mature trees are located within floodway, approximately 45 feet from WS toe. Crossing is classified as Urgent with potential levee integrity issues due to the disturbance of the WS without prior approval from the CVFPB. (DWR UCIP - omagana)

4/28/2016 Landowner appears to have removed the WS headwall and pipe to make room for planting more orchard trees. LS pipe end was full of water as it has no where to drain to anymore. Changing to urgent listing but it currently does not affect the levee integrity. (see photos 8, 9, & 10) (DWR Sutter Yard - afreitag)7/14/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition. (DWR Sutter Yard - afreitag) 4/17/2012 Pipe collapse on WS 10 feet from toe, needs repair. From WS, sediment is visible inside pipe. (DWR UCIP - omagana) FIELD STRUCT DESC: 36-inch corrugated metal drainage pipe through the levee, 7.8 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Slide gate in corrugated metal pipe (CMP) riser on the WS slope. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.62)]

Photo 2 of 3: UCIP_FA_2018_52938_66699.jpg

Corrugated metal riser with slide gate located on WS slope.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	1.59	Rating **	М	Issue No.		93 (cont)	
LM End	1.59	Issue Type +	Ма	Location *			
Category				GPS Lati	tuc	le/Longitude	
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	onsibility	39.57688	3°	39.576883	0
пеш				-121.70277	°	-121.702770	0
DWR ID	16831						

Inspector Comment

Comment Code

FS_ID:52938 DS_ID:16831 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 8/23/2018 1:54:26 PM

UCIP Comments: 8/23/2018 Same as last inspection; still no sign of WS pipe end. Unclear if this SD crossing is still in use. The WS toe has standing, mucky, water around where the pipe end should be Downgrading to Non-Urgent from Urgent because there appears no immediate threat to levee. Recommend follow up with owner to determine pipe use, and an internal pipe inspection to determine pipe integrity and threat to levee (D. Sanoski - DWR UCIP).6/14/2017 Still no sign of WS pipe end. Pipe may need to be traced with GPR and excavated to determine if the WS end was properly capped after the Headwall and pipe sections were removed. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS structures still removed. (DWR Sutter Yard- AFreitag) 10/17/2016 Landowner removed WS concrete headwall and pipe section through floodway to make room for orchard. The area disturbed appears to be from WS toe to where the mature trees are located within floodway, approximately 45 feet from WS toe. Crossing is classified as Urgent with potential levee integrity issues due to the disturbance of the WS without prior approval from the CVFPB. (DWR UCIP - omagana)

4/28/2016 Landowner appears to have removed the WS headwall and pipe to make room for planting more orchard trees. LS pipe end was full of water as it has no where to drain to anymore. Changing to urgent listing but it currently does not affect the levee integrity. (see photos 8, 9, & 10) (DWR Sutter Yard - afreitag)7/14/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition. (DWR Sutter Yard - afreitag) 4/17/2012 Pipe collapse on WS 10 feet from toe, needs repair. From WS, sediment is visible inside pipe. (DWR UCIP - omagana) FIELD STRUCT DESC: 36-inch corrugated metal drainage pipe through the levee, 7.8 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Slide gate in corrugated metal pipe (CMP) riser on the WS slope. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.62)]

Photo 3 of 3: UCIP_FA_2018_52938_66698.jpg



WS headwall, rock protection, and outlet blocked by shrub.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	2.70	Rating **	A/W	Issue No.		96
LM End	2.70	Issue Type +	Ma	Location *		
Supplemental				GPS La	tituc	le/Longitude
Category				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.56113	30°	39.561130°
пеш			-121.7051	40°	-121.705140 °	
DWR ID	16347					

Inspector Comment

Comment Code

FS_ID:52185 DS_ID:16347 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition. 7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 Vegetation/sedimentation from WS has been removed. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect

ID#USACE_CESPK_M13D_2011_p_0130 for WS flap gate closed and blocked by sediment.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.4 feet below the crown. Concrete "U" headwall on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.74)]

FS Date: 6/16/2017 12:27:02 PM

LM Start	2.70	Rating **	A/W	Issue No.	96 (cont)
LM End	2.70	Issue Type +	Ma	Location *	



Overview of levee crown looking downstream at crossing.

Photo 2 of 3: UCIP_FA_2018_52185_66714.jpg



Flap gate at WS.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	2.70	Rating **	A/W	Issue No.	96 (cont)	
LM End	2.70	Issue Type +	Ма	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.56113	0°	39.561130°
пеш					0°	-121.705140°
DWR ID	16347					

Inspector Comment

Comment Code

FS_ID:52185 DS_ID:16347 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition. 7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 Vegetation/sedimentation from WS has been removed. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect

ID#USACE_CESPK_M13D_2011_p_0130 for WS flap gate closed and blesked by additionat

blocked by sediment.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.4 feet below the crown. Concrete "U" headwall on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.74)]

FS Date: 6/16/2017 12:27:02 PM



View of channel.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.05	Rating **	М	Issue No.	97		
LM End	3.05	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.55631	0 °	39.556310°	
пеш	•			-121.70647	o°	-121.706470°	
DWR ID	17372					·	

Inspector Comment

Comment Code

FS_ID:52186 DS_ID:17372 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS flap gate is completely buried by sediment- needs to be dug out. Pipe is about 50% full of sediment inside. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Pipe about 50% full of sediment. (DWR Sutter Yard-

AFreitag)4/28/2016 Pipe on LS is about 50% full of sediment. There is now a concrete pipe that dicharges into the LS inlet of this crossing. Not sure where the concrete pipe comes from.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition.7/15/2013 Pipe appears to have a possible hole in top of pipe about 10ft. in from LS headwall.4/17/2012 LS headwall blocked by sediment (50 % of opening is covered). LS floor is higher than LS pipe invert. WS headwall has been recently cleared of vegetation and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0157 for WS and LS inlet/outlet blocked by sediment.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.8 feet below the crown. Flap gate is located on the waterside (WS). Concrete headwall located on the landside (LS). [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 3.10)]

FS Date: 6/16/2017 12:28:31 PM

Photo 1 of 3 : UCIP_FA_2018_52186_66718.jpg



Overview of levee crown looking downstream at crossing.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.05	Rating **	М	Issue No.		97 (cont)	
LM End	3.05	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start	End		
Item	DWR UCI	P LMA Respo	nsibility	39.5563	10°	39.556310°	
пеш				-121.7064	-121.706470 °		
DWR ID	17372						
	Comment Code						

Inspector Comment

FS ID:52186 DS_ID:17372 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS flap gate is completely buried by sediment- needs to be dug out. Pipe is about 50% full of sediment inside. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Pipe about 50% full of sediment. (DWR Sutter Yard-

AFreitag)4/28/2016 Pipe on LS is about 50% full of sediment. There is now a concrete pipe that dicharges into the LS inlet of this crossing. Not sure where the concrete pipe comes from.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition.7/15/2013 Pipe appears to have a possible hole in top of pipe about 10ft. in from LS headwall.4/17/2012 LS headwall blocked by sediment (50 % of opening is covered). LS floor is higher than LS pipe invert. WS headwall has been recently cleared of vegetation and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0157 for WS and LS inlet/outlet blocked by sediment.

FIELD STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.8 feet below the crown. Flap gate is located on the waterside (WS). Concrete headwall located on the landside (LS). [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 3.10)]

FS Date: 6/16/2017 12:28:31 PM





WS levee slope.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.05	Rating **	М	Issue No.		97 (cont)
LM End	3.05	Issue Type +	Ма	Location *		
Category			GPS La	tituc	le/Longitude	
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.5563	0°	39.556310°
пеш				-121.70647	'0°	-121.706470°
DWR ID	17372				·	

Inspector Comment

Comment Code

FS_ID:52186 DS_ID:17372 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS flap gate is completely buried by sediment- needs to be dug out. Pipe is about 50% full of sediment inside. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Pipe about 50% full of sediment. (DWR Sutter Yard- AFreitag)4/28/2016 Pipe on LS is about 50% full of sediment. There is now a concrete pipe that disparase into the LS inlet of this crossing.

is now a concrete pipe that dicharges into the LS inlet of this crossing. Not sure where the concrete pipe comes from.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition.7/15/2013 Pipe appears to have a possible hole in top of pipe about 10ft. in from LS headwall.4/17/2012 LS headwall blocked by sediment (50 % of opening is covered). LS floor is higher than LS pipe invert. WS headwall has been recently cleared of vegetation and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0157 for WS and LS inlet/outlet blocked by sediment.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.8 feet below the crown. Flap gate is located on the waterside (WS). Concrete headwall located on the landside (LS). [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 3.10)]

FS Date: 6/16/2017 12:28:31 PM



Flap gate on waterside.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.24	Rating **	М	Issue No.		Issue No.		Issue No.		99
LM End	3.24	Issue Type +	Ma	Location *						
Category				GPS La	atitud	e/Longitude				
Calegory				Start		End				
Item	DWR UCIP LMA Responsibility			39.5534	90°	39.553490°				
пеш				-121.7066	80°	-121.706680 °				
DWR ID	16349									

Comment Code Inspector Comment

FS_ID:52188 DS_ID:16349 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Both pipe ends and gates are mostly buried- need to be dug out. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Both gates closed but partially buried and unable to open. (DWR Sutter Yard- AFreitag)4/28/2016 Sediment build up on both gates blocking them from operating properly.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Stem on LS screw gate has been replaced and is now full functional.4/17/2012 LS slide gate stem is bent and prevents gate from fully closing. Both WS and LS have been cleared of debris and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0162 for inoperable gates on WS & LS due to sediment and grass blocking inlet and outlet. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.9 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate visible on the waterside (WS) end. [Additional Reference(s): DWR Levee Log. 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.29)] FS Date: 6/16/2017 12:31:09 PM

LM Start	3.24	Rating **	М	Issue No.	99 (cont)
LM End	3.24	Issue Type +	Ma	Location *	



Overview of levee crown looking DS at crossing.



Flap gate on WS.

** Rating
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.24	Rating **	М	Issue No.		99 (cont)			
LM End	3.24	Issue Type +	Ма	Location *					
Category	Supplemental			Supplemental			GPS Lat	itud	e/Longitude
Calegory			Start		End				
Item	DWR UCI	P LMA Respo	onsibility	39.55349	o°	39.553490°			
пеш				-121.70668	o°	-121.706680 °			
DWR ID	16349								

Inspector Comment

Comment Code

FS_ID:52188 DS_ID:16349 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Both pipe ends and gates are mostly buried- need to be dug out. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Both gates closed but partially buried and unable to open. (DWR Sutter Yard- AFreitag)4/28/2016 Sediment build up on both gates blocking them from operating properly.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Stem on LS screw gate has been replaced and is now full functional.4/17/2012 LS slide gate stem is bent and prevents gate from fully closing. Both WS and LS have been cleared of debris and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0162 for inoperable gates on WS & LS due to sediment and grass blocking inlet and outlet. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.9 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate visible on the waterside (WS) end. [Additional Reference(s): DWR Levee Log. 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.29)] FS Date: 6/16/2017 12:31:09 PM

Photo 3 of 3 : UCIP_FA_2018_52188_66726.jpg



Recent sediment removal on WS.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.27	Rating **	A/W	Issue No.		100			
LM End	3.27	Issue Type +	Ma	Location *					
Category	ental	GPS Latitude/Longitude							
Calegory			Start		End				
Item	DWR UCI	P LMA Respo	nsibility	39.5531	29°	39.553129°			
пеш				-121.7066	40°	-121.706640 °			
DWR ID	ID 16350								
	Comment Code								

Inspector Comment

FS_ID:52189 DS_ID:16350 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is buried by sediment- needs to be dug out. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 WS headwall has been cleared of debris and sedimentation.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.4 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.31)] FS Date: 6/16/2017 12:32:19 PM

 LM Start
 3.27
 Rating **
 A/W
 Issue No.
 100 (cont)

 LM End
 3.27
 Issue Type +
 Ma
 Location *



Overview of levee crown at crossing.

Photo 2 of 3: UCIP_FA_2018_52189_66730.jpg



View of WS flap gate.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence C: Enforcement

* Issue Type

Ma: Maintenance Deficiancy Ob: Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.27	Rating **	A/W	Issue No.		100 (cont)
LM End	3.27	Issue Type +	Ма	Location *		
Category Supplemental GPS				GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.55312	9°	39.553129°
пеш			-121.70664	o°	-121.706640 °	
DWR ID	16350					·

Comment Code

Inspector Comment

FS_ID:52189 DS_ID:16350 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is buried by sediment- needs to be dug out. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 WS headwall has been cleared of debris and sedimentation.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.4 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.31)]

FS Date: 6/16/2017 12:32:19 PM

Photo 3 of 3 : UCIP_FA_2018_52189_66732.jpg



Sedimentation cleared on WS.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.72	Rating **	A/W	Issue No.		101
LM End	3.72	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory			Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.54659	2°	39.546592°
пеш			-121.70756	o°	-121.707560°	
DWR ID	16351					

Comment Code

Inspector Comment

FS_ID:52190 DS_ID:16351 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Both pipe ends were underwater during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Both sides of the crossing were underwater during time of inspection.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes.

FIELD_STRUCT_DESC: 24-inch corrugate metal drainage pipe through the levee, 8.1 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.80)] FS Date: 6/16/2017 12:33:16 PM

LM Start	3.72	Rating **	A/W	Issue No.	101 (cont)
LM End	3.72	Issue Type +	Ma	Location *	



Overview of levee crown at crossing looking downstream.

Photo 2 of 3: UCIP_FA_2018_52190_66738.jpg



WS slope covered by dense vegetation.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.72	Rating **	A/W	Issue No.		101 (cont)	
LM End	3.72	Issue Type +	Ма	Location *			
Category	Suppleme	GPS Latitude/Longitude					
Calegory	Category					End	
Item	DWR UCI	P LMA Respo	nsibility	39.546592	2°	39.546592	0
пеш				-121.70756	°	-121.707560	٥
DWR ID	16351						

Inspector Comment

Comment Code

FS_ID:52190 DS_ID:16351 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Both pipe ends were underwater during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Both sides of the crossing were underwater during time of inspection.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes.

FIELD_STRUCT_DESC: 24-inch corrugate metal drainage pipe through the levee, 8.1 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.80)] FS Date: 6/16/2017 12:33:16 PM



WS flap gate

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.74	Rating **	М	Issue No.		102	
LM End	3.74	Issue Type +	Ма	Location *			
Category	Supplemental				GPS Latitude		
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.5463 ⁻	17°	39.546317°	
item		-121.7075	10°	-121.707510°			
DWR ID	16365						

Inspector Comment

Comment Code

FS_ID:52191 DS_ID:16365 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Appears abandoned- needs to be done properly. WS gate was buried/submerged and the LS slide gate is still damaged and buried. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Both LS and WS gates buried. (DWR Sutter Yard-AFreitag)4/28/2016 Abandoned crossing. Ls screw is still bent and mostly buried.7/14/2015 LS screw gate is still damaged and buried. Crossing is non-functional.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate is still bent and silted over.4/18/2012 LS slide gate covered with silt. Slide gate is bent. Crossing appears not be in use. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes.

FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Flap gate on the waterside (WS) end. Screw gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.82)] FS Date: 6/16/2017 12:35:50 PM

LM Start	3.74	Rating **	М	Issue No.	102 (cont)
LM End	3.74	Issue Type +	Ma	Location *	



Overview of levee crown at crossing looking downstream.

Photo 2 of 3: UCIP_FA_2018_52191_66741.jpg



WS flap gate blocked by debris.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.74	Rating **	М	Issue No.		102 (cont)	
LM End	3.74	Issue Type +	Ма	Location *			
Category	Suppleme	GPS La	atitud	le/Longitude			
Calegory	alegory					End	
Item	DWR UCI	P LMA Respo	nsibility	39.5463	17°	39.546317°	
пеш				-121.7075	10°	-121.707510°	
DWR ID	16365						
Comment Code							

Inspector Comment

FS_ID:52191 DS_ID:16365 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Appears abandoned- needs to be done properly. WS gate was buried/submerged and the LS slide gate is still damaged and buried. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Both LS and WS gates buried. (DWR Sutter Yard-AFreitag)4/28/2016 Abandoned crossing. Ls screw is still bent and mostly buried.7/14/2015 LS screw gate is still damaged and buried. Crossing is non-functional.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate is still bent and silted over.4/18/2012 LS slide gate covered with silt. Slide gate is bent. Crossing appears not be in use. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes.

FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Flap gate on the waterside (WS) end. Screw gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.82)] FS Date: 6/16/2017 12:35:50 PM



LS slide gate covered with silt. Slide gate is bent.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	4.35	Rating **	A/W	Issue No.		103
LM End	4.35	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory						End
Item	DWR UCI	P LMA Respo	nsibility	39.5375	16°	39.537516°
пеш				-121.70758	30°	-121.707580 °
DWR ID	16341					

Inspector Comment

Comment Code

FS_ID:52193 DS_ID:16341 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is shut but blocked by sediment- needs to be dug out. LS slide gate has some minor sediment built up against it. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.12/2/2013 Same as last inspection.4/18/2012 Minor debris on landside inlet. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0189 for sediment and grass blocking WS and LS.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.1 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.43)] FS Date: 6/16/2017 12:52:19 PM

LM Start	4.35	Rating **	A/W	Issue No.	103 (cont)
LM End	4.35	Issue Type +	Ma	Location *	



Overview of levee crown at crossing looking upstream.

Photo 2 of 3: UCIP_FA_2018_52193_66753.jpg



View of WS slope and toe.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence C: Enforcement

* Issue Type

Ma: Maintenance Deficiancy Ob: Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	4.35	Rating **	A/W	Issue No.		103 (cont)
LM End	4.35	Issue Type +	Ма	Location *		
Category			GPS La	tituc	le/Longitude	
Calegory			Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.53751	6°	39.537516°
пеш			-121.70758	80°	-121.707580°	
DWR ID	16341					

Comment Code

Inspector Comment

FS_ID:52193 DS_ID:16341 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is shut but blocked by sediment- needs to be dug out. LS slide gate has some minor sediment built up against it. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Minor debris on landside inlet. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0189 for sediment and grass blocking WS and LS.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.1 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.43)] FS Date: 6/16/2017 12:52:19 PM



View of WS.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	4.85	Rating **	A/W	Issue No.		104
LM End	4.85	Issue Type +	Ма	Location *		
Category Supplemental				GPS Latitude		
Calegory				Start		End
Item	DWR UCI	39.53022	0°	39.530220°		
пеш				-121.70794	0°	-121.707940°
DWR ID	16355					

Inspector Comment

Comment Code

FS_ID:52194 DS_ID:16355 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is submerged and appears to be half buried by sediment. LS slide gate is fully submerged on the edge of the rice field. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS screw gate was completely submerged but crossing appears to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 No signs of burrowing activity on this inspection.4/18/2012 Burrow activity near crossing, burrow holes present on WS slope.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee 7.7 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.94)] FS Date: 6/16/2017 12:55:37 PM

LM Start	4.85	Rating **	A/W	Issue No.	104 (cont)
LM End	4.85	Issue Type +	Ma	Location *	



Overview of levee crown at crossing looking downstream at righ bank of Cherokee Canal.

Photo 2 of 3: UCIP_FA_2018_52194_66758.jpg



Burrow activity on WS slope.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	4.85	Rating **	A/W	Issue No.		104 (cont)	
LM End	4.85	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitud			
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	onsibility	39.53022	0°	39.530220°	
пеш				-121.70794	0°	-121.707940°	
DWR ID	16355					·	

Inspector Comment

Comment Code

FS_ID:52194 DS_ID:16355 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is submerged and appears to be half buried by sediment. LS slide gate is fully submerged on the edge of the rice field. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS screw gate was completely submerged but crossing appears to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 No signs of burrowing activity on this inspection.4/18/2012 Burrow activity near crossing, burrow holes present on WS slope.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee 7.7 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.94)]

FS Date: 6/16/2017 12:55:37 PM



View of WS flap gate.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.33	Rating **	A/W	Issue No.		105		
LM End	5.33	Issue Type +	Ма	Location *				
Category				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	39.52323	6°	39.523236°				
пеш			-121.70765	0°	-121.707650°			
DWR ID	16356							

Inspector Comment

Comment Code

FS_ID:52195 DS_ID:16356 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good conditio. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good

condition.7/13/2015 LS screw gate was completely submerged and WS flapgate was propped open by a wood block but crossing appears

to be in good condition.5/21/2014 Same as last

inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Minor vegetation on LS slope. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0204 for restriction view of gates. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.4 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.43)]

FS Date: 6/16/2017 1:04:28 PM

LM Start	5.33	Rating **	A/W	Issue No.	105 (cont)
LM End	5.33	Issue Type +	Ma	Location *	



Overview of levee crown at crossing looking D/S on right bank of Cherokee Canal.

Photo 2 of 3: UCIP_FA_2018_52195_66760.jpg



WS Flap Gate

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.33	Rating **	A/W	Issue No.		105 (cont)	
LM End	5.33	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	onsibility	39.52323	6°	39.523236°	
пеш				-121.70765	o°	-121.707650°	
DWR ID	16356						

Inspector Comment

Comment Code

FS_ID:52195 DS_ID:16356 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good conditio. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good

condition.7/13/2015 LS screw gate was completely submerged and WS flapgate was propped open by a wood block but crossing appears to be in good condition *F/31/2014*. Some as left

to be in good condition.5/21/2014 Same as last

inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Minor vegetation on LS slope. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0204 for restriction view of gates. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.4 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.43)]

FS Date: 6/16/2017 1:04:28 PM

Photo 3 of 3: UCIP_FA_2018_52195_66763.jpg



WS view of outlet cleared of vegetation.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.38	Rating **	М	Issue No.		106	
LM End	5.38	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory	Category					End	
Item	DWR UCI	DWR UCIP LMA Responsibility			6°	39.522566 °	
item			-121.70756	0°	-121.707560 °		
DWR ID	16357						

Inspector Comment

Comment Code

FS ID:52196 DS_ID:16357 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is partially buried by sediment- needs to be dug out. LS appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS flap gate closed but blocked from opening by sediment. (DWR Sutter Yard-AFreitag)4/28/2016 WS flap gate blocked from opening by sediment.7/13/2015 WS flap gate is blocked from opening by sediment. Needs to be dug out.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls an both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.48)]

FS Date: 6/16/2017 1:05:09 PM

LM Start	5.38	Rating **	М	Issue No.	106 (cont)
LM End	5.38	Issue Type +	Ma	Location *	





Overview of levee crown at crossing looking downstream.

Photo 2 of 3: UCIP_FA_2018_52196_66765.jpg



View of WS slope and channel.

Location + Issue Type Ma: Maintenance Deficiancy LS: Land Side N/A: Not Applicable Acceptable N : Not Inspected/Rated WS: Water Side Minimally Acceptable Ob : Design & System Obsolescence C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.38	Rating **	М	Issue No.		106 (cont)	
LM End	5.38	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS Lat	itud	e/Longitude	
Calegory	Category					End	
Item	DWR UCI	P LMA Respo	onsibility	39.52256	6°	39.522566 °	
item		-121.70756	0 °	-121.707560°			
DWR ID	16357						

Inspector Comment

Comment Code

FS_ID:52196 DS_ID:16357 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is partially buried by sediment- needs to be dug out. LS appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 WS flap gate closed but blocked from opening by sediment. (DWR Sutter Yard-AFreitag)4/28/2016 WS flap gate is blocked from opening by sediment. Needs to be dug out.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls an both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 5.48)] FS Date: 6/16/2017 1:05:09 PM



View of WS flap gate.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.63	Rating **	М	Issue No.		Issue No.		107
LM End	5.63	Issue Type +	Ma	Location *				
Category	Suppleme	GPS Latitude/Longitude						
Calegory	Category					End		
Item	DWR UCIP LMA Responsibility			39.5192	12 °	39.519212°		
item			-121.7090	30°	-121.709030 °			
DWR ID	16359					·		

Inspector Comment

Comment Code

FS_ID:52201 DS_ID:16359 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS Flap gate is completely buried- needs to be dug out. LS is blocked off by flashboards that are partially buried. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS still completely buried. (DWR Sutter Yard- AFreitag)4/28/2016 WS gate and headwall are buried. Only the top of the headwall was visible. LS appeared ok.7/13/2015 Both the LS screw gate and WS flapgate are completely buried.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS headwall and flapgate are fully covered in debris and not visible. Need to clear.4/18/2012 High sedimentation build up at WS and LS headwall. Limited inspection due to dense vegetation on WS and LS slope. Need photo of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

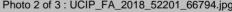
USACE_CESPK_M13D_2011_p_0210 for WS gate submerged. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.73)]

FS Date: 6/16/2017 1:29:37 PM

LM Start	5.63	Rating **	М	Issue No.	107 (cont)
LM End	5.63	Issue Type +	Ma	Location *	



Overview of levee crown at crossing looking downstream.





View of WS slope and toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.63	Rating **	М	Issue No.		107 (cont)
LM End	5.63	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory	Category					End
Item	DWR UCI	P LMA Respo	onsibility	39.51921	2 °	39.519212°
item			-121.70903	0°	-121.709030°	
DWR ID	16359					

Inspector Comment

Comment Code

FS_ID:52201 DS_ID:16359 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS Flap gate is completely buried- needs to be dug out. LS is blocked off by flashboards that are partially buried. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS still completely buried. (DWR Sutter Yard- AFreitag)4/28/2016 WS gate and headwall are buried. Only the top of the headwall was visible. LS appeared ok.7/13/2015 Both the LS screw gate and WS flapgate are completely buried.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS headwall and flapgate are fully covered in debris and not visible. Need to clear.4/18/2012 High sedimentation build up at WS and LS headwall. Limited inspection due to dense vegetation on WS and LS slope. Need photo of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13D_2011_p_0210 for WS gate submerged. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 5.73)] FS Date: 6/16/2017 1:29:37 PM

Photo 3 of 3 : UCIP_FA_2018_52201_66791.jpg



View of WS flap gate buried.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.87	Rating **	A/W	Issue No.		108
LM End	5.87	Issue Type +	Ma	Location *		
Category	Suppleme	olemental GPS Latitude/Longitu			e/Longitude	
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.51605	9°	39.516059°
пеш				-121.71081	o°	-121.710810°
DWR ID	16360					·

Inspector Comment

Comment Code

FS_ID:52202 DS_ID:16360 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. LS is completely submerged in an irrigation ditch. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS screw gate was completely submerged but crossing appears to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Burrow activity near crossing; burrow holes present on LS. FIELD STRUCT DESC: 24-inch corrugated metal drainage pipe through the levee, 6.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.97)] FS Date: 6/16/2017 1:49:28 PM

LM Start	5.87	Rating **	A/W	Issue No.	108 (cont)
LM End	5.87	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_FA_2018_52202_66800.jpg



Overview of levee crown at crossing looking downstream.

Photo 2 of 3: UCIP_FA_2018_52202_66801.jpg



View of WS slope and toe.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.87	Rating **	A/W	Issue No.		108 (cont)	
LM End	5.87	Issue Type +	Ma	Location *			
Category	Suppleme	pplemental			GPS Latitude/Longitude		
Calegory			Start		End		
Item	DWR UCI	P LMA Respo	onsibility	39.5160	59°	39.516059°	
пеш				-121.7108	10°	-121.710810°	
DWR ID	16360						

Inspector Comment

Comment Code

FS_ID:52202 DS_ID:16360 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. LS is completely submerged in an irrigation ditch. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS screw gate was completely submerged but crossing appears to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Burrow activity near crossing; burrow holes present on LS. FIELD STRUCT DESC: 24-inch corrugated metal drainage pipe through the levee, 6.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.97)] FS Date: 6/16/2017 1:49:28 PM



Flap gate WS

LM Start	6.03	Rating **	Α	Issue No.	55	
LM End	6.03	Issue Type +	Ма	Location *	LS	
Category	evee	GPS Latitude/Longitude				
Category				Start		End
Item	Vegetatio	n		39.5140	18°	39.514018°
пеш				-121.7120	27°	-121.712027°
DWR ID DWR_MA0013_01_f _ 2018_55						
Comment Code						

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

The vegetation was mowed on both slopes.

Photo 1 of 1: FA_2018_MA0013_300_55_20181102_00141.jpg



View of the mowed vegetation on both slopes.

* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated
M: Minimally Acceptable
C: Corrected
M: Minimally Acceptable
U: Unacceptable
AW: Acceptable but Monitor & Maintain

** Rating
A: Issue Type
Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	6.23	Rating **	М	Issue No.		109
LM End	6.23	Issue Type +	Ма	Location *		
Category Supplemental GPS		GPS Lat	itud	e/Longitude		
Calegory						End
Item	DWR UCI	P LMA Respo	onsibility	39.51133	7°	39.511337°
пеш				-121.71362	o°	-121.713620°
DWR ID	16361					

Inspector Comment

Comment Code

FS_ID:52203 DS_ID:16361 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS appears to be in good condition. LS slide gate is buried and submerged. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 LS screwgate is buried and non-operational. (DWR Sutter Yard- AFreitag)4/28/2016 LS screwgate is still completely buried. 7/13/2015 LS screw gate is completely buried.5/21/2014 Same as last inspection.7/15/2013 WS slope has been cleared of vegetation and is in good condition. LS screw gate is still buried.12/2/2013 Same as last inspection.4/18/2012 LS slide gate is buried. Pipe is not visible on LS toe. Limited inspection on WS slope due to dense vegetation.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.4 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 6.34)]

FS Date: 6/16/2017 1:51:41 PM

LM Start	6.23	Rating **	М	Issue No.	109 (cont)
LM End	6.23	Issue Type +	Ma	Location *	



Overview of levee crown at crossing looking downstream.

Photo 2 of 3: UCIP_FA_2018_52203_66806.jpg



View of WS slope and toe.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	6.23	Rating **	М	Issue No.		109 (cont)
LM End	6.23	Issue Type +	Ma	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UCI	IP LMA Respo	onsibility	39.51133	7 °	39.511337°
пеш				-121.71362	o°	-121.713620°
DWR ID	16361					

Inspector Comment

Comment Code

FS_ID:52203 DS_ID:16361 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS appears to be in good condition. LS slide gate is buried and submerged. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 LS screwgate is buried and non-operational. (DWR Sutter Yard- AFreitag)4/28/2016 LS screwgate is still completely buried. 7/13/2015 LS screw gate is completely buried.5/21/2014 Same as last inspection.7/15/2013 WS slope has been cleared of vegetation and is in good condition. LS screw gate is still buried.12/2/2013 Same as last inspection.4/18/2012 LS slide gate is buried. Pipe is not visible on LS toe. Limited inspection on WS slope due to dense vegetation.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.4 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 6.34)]

FS Date: 6/16/2017 1:51:41 PM



View of WS flap gate.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	6.99	Rating **	М	Issue No.		110
LM End	6.99	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory			Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.50147	9°	39.501479°
item			-121.71971	o°	-121.719710°	
DWR ID	16329					·

Inspector Comment

Comment Code

FS_ID:52211 DS_ID:16329 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 LS slide gate is still damaged and needing to be replaced. WS appeared to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Needs a new screw gate installed on the LS. (DWR Sutter Yard- AFreitag)4/28/2016 LS slide gate is still bent. Everyhting else with the crossing appeared ok.7/13/2015 LS screw gate needs to be replaced. Everything else with crossing seems to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. There were no apparent signs of settling. LS screw gate is still damaged.4/18/2012 LMA's inspection sheet of 2011 indicates settlement and visible corrosion. Damage/severe corrosion on screw gate where it bolts to headwall. No visible signs of settlement due to high vegetation cover. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes for this crossing. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.10)] FS Date: 6/19/2017 10:17:38 AM

LM Start	6.99	Rating **	М	Issue No.	110 (cont)
LM End	6.99	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2018_52211_66833.jpg



Overview of levee crown at crossing looking D/S.

Photo 2 of 3: UCIP FA 2018 52211 66832.jpg



View of WS slope and toe.

* Location	** Rating		+ Issue Type		
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement		

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	6.99	Rating **	М	Issue No.	110 (cont)		
LM End	6.99	Issue Type +	Ма	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCIP LMA Responsibility			39.5014	79°	39.501479°	
пеш				-121.719710°		-121.719710°	
DWR ID	DWR ID 16329						
	Comment Code						

Inspector Comment

FS_ID:52211 DS_ID:16329 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 LS slide gate is still damaged and needing to be replaced. WS appeared to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Needs a new screw gate installed on the LS. (DWR Sutter Yard- AFreitag)4/28/2016 LS slide gate is still bent. Everyhting else with the crossing appeared ok.7/13/2015 LS screw gate needs to be replaced. Everything else with crossing seems to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. There were no apparent signs of settling. LS screw gate is still damaged.4/18/2012 LMA's inspection sheet of 2011 indicates settlement and visible corrosion. Damage/severe corrosion on screw gate where it bolts to headwall. No visible signs of settlement due to high vegetation cover. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes for this crossing. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.10)] FS Date: 6/19/2017 10:17:38 AM



WS Flap Gate

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	7.22	Rating **	М	Issue No.	111		
LM End	7.22	Issue Type +	Ma	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCIP LMA Responsibility			39.49884	15 °	39.498845°	
item				-121.7224	10°	-121.722440 °	
DWR ID	DWR ID 16354						
Comment Code							

Inspector Comment

FS ID:52212 DS_ID:16354 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 LS slide gate stem still bent. WS appeared to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Screw gate stem bent but gate is still operational. (DWR Sutter Yard- AFreitag)4/28/2106 Tested positive closure device the bent stem on the slide gate did not seem to affect its functions. Gate operable.7/13/2015 LS screw gate stem is still bent. Gate should still be able to close fully. The rest of the crossing seems to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate stem is still bent.4/18/2012 LS slide gate stem is bent and needs to be replaced. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes during next inspection. Confirmed flap gate on WS. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0244 for submerged WS gate. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log. 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.34)] FS Date: 6/19/2017 10:19:12 AM



Photo 1 of 3: UCIP_FA_2018_52212_66844.jpg

Overview of levee crown at crossing looking D/S.

+ Issue Type N : Not Inspected/Rated Ma: Maintenance Deficiancy Ob : Design & System Obsolescence C : Corrected A/W : Acceptable but Monitor & Maintain En: Enforcement

FINAL DATA

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	7.22	Rating **	М	Issue No.		111 (cont)		
LM End	7.22	Issue Type +	Ма	Location *				
Category				GPS Latitude/Longitude				
Calegory	Category					End		
Item	DWR UCI	P LMA Respo	nsibility	39.49884	5°	39.498845°		
пеш				-121.72244	o Ol	-121.722440 °		
DWR ID	16354							
	Comment Code							

Inspector Comment

FS_ID:52212 DS_ID:16354 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 LS slide gate stem still bent. WS appeared to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Screw gate stem bent but gate is still operational. (DWR Sutter Yard- AFreitag)4/28/2106 Tested positive closure device the bent stem on the slide gate did not seem to affect its functions. Gate operable.7/13/2015 LS screw gate stem is still bent. Gate should still be able to close fully. The rest of the crossing seems to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate stem is still bent.4/18/2012 LS slide gate stem is bent and needs to be replaced. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes during next inspection. Confirmed flap gate on WS. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0244 for submerged WS gate. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log. 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.34)] FS Date: 6/19/2017 10:19:12 AM

Photo 2 of 3: UCIP_FA_2018_52212_66845.jpg



View of WS slope and toe.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	7.22	Rating **	М	Issue No.		Issue No.		111 (cont)
LM End	7.22	Issue Type +	Ма	Location *				
Category				GPS Latitude/Longitude				
Calegory			Start		End			
Item	DWR UCI	P LMA Respo	nsibility	39.49884	45 °	39.498845°		
item			-121.722440 °		-121.722440 °			
DWR ID	16354							

Inspector Comment

Comment Code

FS ID:52212 DS_ID:16354 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 LS slide gate stem still bent. WS appeared to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Screw gate stem bent but gate is still operational. (DWR Sutter Yard- AFreitag)4/28/2106 Tested positive closure device the bent stem on the slide gate did not seem to affect its functions. Gate operable.7/13/2015 LS screw gate stem is still bent. Gate should still be able to close fully. The rest of the crossing seems to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate stem is still bent.4/18/2012 LS slide gate stem is bent and needs to be replaced. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes during next inspection. Confirmed flap gate on WS. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0244 for submerged WS gate. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log. 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.34)] FS Date: 6/19/2017 10:19:12 AM





WS Flap Gate

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	7.46	Rating **	A/W	Issue No.		Issue No.		112
LM End	7.46	Issue Type +	Ma	Location *				
Category Supplemental			GPS Latitude/Longitude					
Calegory						End		
Item	DWR UCIP LMA Responsibility			39.49614	46 °	39.496146°		
пеш				-121.72516	60°	-121.725160°		
DWR ID	16352							

Inspector Comment

Comment Code

FS_ID:52213 DS_ID:16352 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good

condition.7/13/2015 WS ditch is getting to be heavily vegetated but it is not yet affecting flap gate operation. Vegetation needs to be cleared back some.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.2 feet below the crown. Flap gate on the waterside (WS) end. Screw gate on the landside (LS) end. Concrete headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.58)] FS Date: 6/19/2017 10:29:30 AM

LM Start	7.46	Rating **	A/W	Issue No.	112 (cont)
LM End	7.46	Issue Type +	Ma	Location *	



View of levee crown at crossing looking D/S.

Photo 2 of 3: UCIP FA 2018 52213 66851.jpg



WS view of slope and channel.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	7.46	Rating **	A/W	Issue No.	112 (cont)	
LM End	7.46	Issue Type +	Ма	Ma Location *		
Category			Supplemental			e/Longitude
Calegory	Category			Start		End
Item	DWR UCIP LMA Responsibility			39.49614	6°	39.496146°
пеш				-121.72516	0°	-121.725160 °
DWR ID	16352					

Inspector Comment

Comment Code

FS_ID:52213 DS_ID:16352 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good

condition.7/13/2015 WS ditch is getting to be heavily vegetated but it is not yet affecting flap gate operation. Vegetation needs to be cleared back some.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.2 feet below the crown. Flap gate on the waterside (WS) end. Screw gate on the landside (LS) end. Concrete headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.58)] FS Date: 6/19/2017 10:29:30 AM

Photo 3 of 3: UCIP_FA_2018_52213_66849.jpg



View of WS flap gate. Dense vegetation on WS slope.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence

En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	7.64	Rating **	A/W	Issue No.		113			
LM End	7.64	Issue Type +	Ма	Location *					
Catagony	Category Supplemental			Supplemental			GPS Lat	itud	le/Longitude
Calegory				Start		End			
Item	DWR UCI	P LMA Respo	onsibility	39.49375	6°	39.493756°			
пеш				-121.72657	o°	-121.726570°			
DWR ID	16320								

Inspector Comment

Comment Code

FS_ID:52217 DS_ID:16320 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Debris down inside of WS riser. The rest of the crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 The bottom of the entire pipe has about 8inch of sediment in it. Sediment is preventing the screw gate from fully closing. WS flap gate seems to be in good condition.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.

FIELD_STRUCT_DESC: 48-inch corrugated metal drainage pipe through the levee, 9.9 feet below the crown. Flap gate on the waterside (WS) end. Slide gate in corrugated metal pipe riser on the WS slope. Concrete "U" headwalls on both ends. Spillway grouted for 35 feet. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento

O&M Manual 519, June 1962 (HLM 7.76)] FS Date: 6/19/2017 12:43:02 PM

 LM Start
 7.64
 Rating **
 A/W
 Issue No.
 113 (cont)

 LM End
 7.64
 Issue Type +
 Ma
 Location *



Overview of levee crown at crossing (past gate) looking D/S.

Photo 2 of 3: UCIP_FA_2018_52217_66865.jpg



View of WS slope, corrugated metal riser with slide gate.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	7.64	Rating **	A/W	Issue No.		113 (cont)
LM End	7.64	Issue Type +	Ма	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.49375	6°	39.493756°
пеш				-121.72657	0 °	-121.726570°
DWR ID	16320					

Inspector Comment

Comment Code

FS_ID:52217 DS_ID:16320 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Debris down inside of WS riser. The rest of the crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 The bottom of the entire pipe has about 8inch of sediment in it. Sediment is preventing the screw gate from fully closing. WS flap gate seems to be in good condition.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.

FIELD_STRUCT_DESC: 48-inch corrugated metal drainage pipe through the levee, 9.9 feet below the crown. Flap gate on the waterside (WS) end. Slide gate in corrugated metal pipe riser on the WS slope. Concrete "U" headwalls on both ends. Spillway grouted for 35 feet. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento

O&M Manual 519, June 1962 (HLM 7.76)] FS Date: 6/19/2017 12:43:02 PM



WS Slide gate

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	8.00	Rating **	A/W	Issue No.		114
LM End	8.00	Issue Type +	Ма	Location *		
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.48906	ı °	39.489061 °
пеш				-121.729430	°	-121.729430°
DWR ID	16321					

Inspector Comment

Comment Code

FS_ID:52218 DS_ID:16321 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears to be in good condition.

condition.7713/2013 Glossing appears to be in good condition.

5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Sediment build up against flashboards. Flashboards are in use on landside of levee.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.12)]

FS Date: 6/19/2017 12:45:23 PM

LM Start	8.00	Rating **	A/W	Issue No.	114 (cont)
LM End	8.00	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_FA_2018_52218_66872.jpg



Overview of levee crown at crossing looking D/S.

Photo 2 of 3: UCIP_FA_2018_52218_66873.jpg



View of WS slope and toe.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	8.00	Rating **	A/W	Issue No.		114 (cont)	
LM End	8.00	Issue Type +	Ма	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	onsibility	39.48906	1°	39.489061 °	
пеш				-121.72943	o°	-121.729430 °	
DWR ID	16321						

Inspector Comment

Comment Code

FS ID:52218 DS_ID:16321 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good

condition.7/13/2015 Crossing appears to be in good condition.

5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Sediment build up against flashboards. Flashboards are in use on landside of levee.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.12)]

FS Date: 6/19/2017 12:45:23 PM





WS Flap gate

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	8.27	Rating **	М	Issue No.		115		
LM End	8.27	Issue Type +	Ма	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory				Start		End		
Item	DWR UCI	P LMA Respo	nsibility	39.48543	32 °	39.485432°		
пеш				-121.73159	00°	-121.731590°		
DWR ID	16322					·		

Inspector Comment

Comment Code

FS_ID:52219 DS_ID:16322 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Both sides of the crossing were buried with sediment- needs to be cleared away. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS falp gate is closed but is blocked from opening by sediment. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Minor sediment build up blocking flap gate from opening on WS. Needs to be dug out.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes are cleared of vegetation and are in good condition. WS flapgate is blocked from opening fully by sediment.4/18/2012 Sediment build up on LS. Debris (broken panels) scattered near LS headwall. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared WS and LS slopes.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.3 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.40)]

FS Date: 6/19/2017 12:47:00 PM

LM Start	8.27	Rating **	М	Issue No.	115 (cont)
LM End	8.27	Issue Type +	Ma	Location *	



Overview of levee crown at crossing looking D/S.

Photo 2 of 3: UCIP_FA_2018_52219_66874.jpg



View of WS slope and toe.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	8.27	Rating **	М	Issue No.		115 (cont)
LM End	8.27	Issue Type +	Ма	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.48543	2 °	39.485432 °
пеш				-121.73159	o°	-121.731590°
DWR ID	16322					

Inspector Comment

Comment Code

FS ID:52219 DS_ID:16322 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Both sides of the crossing were buried with sediment- needs to be cleared away. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS falp gate is closed but is blocked from opening by sediment. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Minor sediment build up blocking flap gate from opening on WS. Needs to be dug out.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes are cleared of vegetation and are in good condition. WS flapgate is blocked from opening fully by sediment.4/18/2012 Sediment build up on LS. Debris (broken panels) scattered near LS headwall. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared WS and LS slopes.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.3 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.40)]

FS Date: 6/19/2017 12:47:00 PM



View of WS flap gate and headwall.

LM Start	8.81	Rating **	М	Issue No.		49	
LM End	8.81	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee	GPS Latitude/Longitude				
Calegory				Start		End	
Item	Erosion / Bank Caving				48°	39.478648°	
пеш				-121.7364	77°	-121.736477 °	
DWR ID	DWR_MA0	013_01_f _ 201	6_49				
Comment Code							
E2 : Schedule repair of erosion site prior to the next inspection.							

Inspector Comment

Photo 1 of 1: FA_2018_MA0013_300_49_20180905_00006.jpg



View of the erosion site along the landside toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	8.84	Rating **	М	Issue No.		117
LM End	8.84	Issue Type +	Ma	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory	Category					End
Item	DWR UCIP LMA Responsibility			39.47828	81 °	39.478281 °
пеш				-121.73678	80°	-121.736780°
DWR ID	16325				·	

Inspector Comment

Comment Code

FS_ID:52223 DS_ID:16325 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Debris drifts built up around the WS slide gates- needs to be cleared away. LS appears to be n good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 LS slope has been sprayed and cleared of vegetation and is in good condition.4/18/2012 Limited inspection on LS slope due to dense vegetation. Need photo of cleared vegetation from slopes and WS headwall. Minor debris scattered on WS slope.

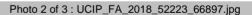
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.6 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Slide gate on the WS end. Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.98)]

FS Date: 6/19/2017 12:59:24 PM

LM Start	8.84	Rating **	М	Issue No.	117 (cont)
LM End	8.84	Issue Type +	Ma	Location *	



Overview of levee crown at crossing looking D/S.





View of WS slope with 2 slide gates.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	8.84	Rating **	М	Issue No.	117 (cont)		
LM End	8.84	Issue Type +	Ма	Location *			
Category			GPS Latitude/Longitude				
Category	Category			Start		End	
Item	DWR UCI	P LMA Respo	onsibility	39.47828	1°	39.478281 °	
пеш			-121.73678	o°	-121.736780°		
DWR ID	16325						
Comment Code							

Inspector Comment

FS_ID:52223 DS_ID:16325 EP_NO: N/A

1962 (HLM 8.98)]

FS Date: 6/19/2017 12:59:24 PM

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Debris drifts built up around the WS slide gates- needs to be cleared away. LS appears to be n good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 LS slope has been sprayed and cleared of vegetation and is in good condition.4/18/2012 Limited inspection on LS slope due to dense vegetation. Need photo of cleared vegetation from slopes and WS headwall. Minor debris scattered on WS slope. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.6 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Slide gate on the WS end. Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June



View of slide gate on WS. Debris blocking gate.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	8.95	Rating **	A/W	Issue No.		Issue No.		Issue No.		120
LM End	8.95	Issue Type +	Ma	Location *						
Supplemental				GPS Latitude/Longitude						
Calegory	Category					End				
Item	DWR UCI	onsibility	39.4768	39°	39.476839°					
пеш			-121.7375	40°	-121.737540°					
DWR ID	16317									

Inspector Comment

Comment Code

FS_ID:52227 DS_ID:16317 EP_NO: N/A

LM Start

LM End

8.95

8.95

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS inlet has minor vegetation still. WS appears in good condition.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspections as Corp's Inpect ID# USACE_CESPK_M13D_2011_p_0278 for WS outlet sedimentation and sediment/grass at LS inlet. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 10.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519. June 1962 (HLM 9.09)] FS Date: 6/19/2017 1:09:21 PM

A/W

Ma

Issue No.

Location 3

120 (cont)

Rating **

Issue Type +

Photo 1 of	3: UCIP_FA	_2018_5222	7_66910.j	pg
	ADD TO		24 10	A %
			-	7
	A.	-		
		(VOI)		
	J. Charles			

Overview of levee crown at crossing looking downstream.

Photo 2 of 3: UCIP_FA_2018_52227_66911.jpg



View of WS slope and toe.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence Cn: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy Ob: Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	8.95	Rating **	A/W	Issue No.		120 (cont)	
LM End	8.95	Issue Type +	Ма	Location *			
Supplemental				GPS Latitude/Longitude			
Calegory	Category					End	
Item	DWR UCIP LMA Responsibility			39.47683	89°	39.476839 °	
пеш				-121.73754	10°	-121.737540 °	
DWR ID	16317						

Inspector Comment

Comment Code

FS_ID:52227 DS_ID:16317 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

Manual 519, June 1962 (HLM 9.09)] FS Date: 6/19/2017 1:09:21 PM

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS inlet has minor vegetation still. WS appears in good condition.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspections as Corp's Inpect ID# USACE_CESPK_M13D_2011_p_0278 for WS outlet sedimentation and sediment/grass at LS inlet. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 10.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Photo 3 of 3: UCIP_FA_2018_52227_66912.jpg



View of LS slope and toe.

LM Start	9.70	Rating **	М	Issue No.		5	
LM End	9.72	Issue Type +	Ма	Location *		LS	
Category Earthen Levee			GPS Latitude/Longitude				
Category	Calegory			Start		End	
Item	Trim / Thi	n Trees		39.4671	70°	39.466860 °	
item				-121.7438	87°	-121.744108°	
DWR ID DWR_MA0013_01_s _ 2012_5							
Comment Code							

T1 : Trim trees to at least five feet above ground level.

Inspector Comment



View of the overgrown trees along the landside slope and toe.

* Location		** Rating		+ Issue Type
LS: Land Side N/A:	: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	9.75	Rating **	М	Issue No.		64		
LM End	9.75	Issue Type +	Ма	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Calegory				Start		End		
Item	Trim / Thi	n Trees		39.4664	78°	39.466478°		
пеш				-121.7443	38°	-121.744338°		
DWR ID	DWR_MA0	013_01_f _ 201	6_64					
		Comn	nent Coo	de				
T1 : Trim t	rees to at l	east five feet	above g	round level.	•			
	Inspector Comment							

No Photos

LM Start	11.03	Rating **	A/W	Issue No.		121	
LM End	11.03	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS La	titud	le/Longitude	
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	onsibility	39.4498	86°	39.449886	0
пеш				-121.7550	50°	-121.755050	0
DWR ID	16332						

Comment Code

Inspector Comment

FS_ID:52232 DS_ID:16332 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing

appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last

inspection, 12/3/2013 Same as last inspection, 7/15/2013 Same as

last inspection.

FIELD STRUCT DESC: 60-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on both ends and weir in channel. Crossing is used as an irrigation turnout. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento

O&M Manual 519, June 1962 (HLM 11.21)]

FS Date: 6/19/2017 1:17:54 PM

Photo 1 of 3: UCIP_FA_2018_52232_66926.jpg



View of WS corrugated metal riser and concrete wall.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	11.03	Rating **	A/W	Issue No.		121 (cont)
LM End	11.03	Issue Type +	Ма	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.44988	86°	39.449886°
пеш				-121.75505	0°	-121.755050 °
DWR ID	16332					

Inspector Comment

Comment Code

FS_ID:52232 DS_ID:16332 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing

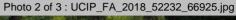
appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as 745/2014 Condition.

inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.

FIELD_STRUCT_DESC: 60-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on both ends and weir in channel. Crossing is used as an irrigation turnout. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 11.21)]

FS Date: 6/19/2017 1:17:54 PM

LM Start	11.03	Rating **	A/W	Issue No.	121 (cont)
LM End	11.03	Issue Type +	Ma	Location *	





Corrugated metal riser with owner information.

Photo 3 of 3: UCIP_FA_2018_52232_66928.jpg



Trash rack on WS headwall.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	11.58	Rating **	A/W	Issue No.		4	
LM End	11.59	Issue Type +	Ma	Location *		WS	
Category				GPS Latitude/Longitude			
Calegory				Start	End		
Item		CE Erosion S	Survey,	39.44282	21 °	39.442738 °	
пеш	DRAFT			-121.7598	51 °	-121.759908°	
DWR ID DWR_MA0013_01_s _ 2016_4							
Comment Code							

Inspector Comment

2011 - Small erosion pocket likely caused by irrigation diversion structure. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: CHK_11-7_R]

No Photos

LM Start	11.60	Rating **	A/W	Issue No.		122	
LM End	11.60	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	IP LMA Respo	nsibility	39.44263	39°	39.442639°	
item				-121.76007	70°	-121.760070 °	
DWR ID 16333							
	Comment Code						

Inspector Comment

FS_ID:52233 DS_ID:16333 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing

appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection, 12/3/2013 Same as last inspection, 7/15/2013 Same as

last inspection.

FIELD STRUCT DESC: 60-inch corrugated metal drainage pipe through the levee, 11.3 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on both ends. Crossing is used as an irrigation turnout bar code plate located on the WS slide gate (identified as 145). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 11.78)] FS Date: 6/19/2017 1:20:52 PM

Photo 1 of 3: UCIP_FA_2018_52233_66934.jpg



Overview of levee crown at crossing looking downstream.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	11.60	Rating **	A/W	Issue No.		122 (cont)
LM End	11.60	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.44263	39°	39.442639°
пеш				-121.76007	70 °	-121.760070°
DWR ID	16333					·

Inspector Comment

Comment Code

FS_ID:52233 DS_ID:16333 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing

appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as

last inspection.

FIELD_STRUCT_DESC: 60-inch corrugated metal drainage pipe through the levee, 11.3 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on both ends. Crossing is used as an irrigation turnout bar code plate located on the WS slide gate (identified as 145). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 11.78)] FS Date: 6/19/2017 1:20:52 PM

LM Start	11.60	Rating **	A/W	Issue No.	122 (cont)
LM End	11.60	Issue Type +	Ma	Location *	

Photo 2 of 3: UCIP_FA_2018_52233_66932.jpg



WS slide gate with owner information.

Photo 3 of 3: UCIP_FA_2018_52233_66930.jpg



Trash rack on WS headwall.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	12.19	Rating **	М	Issue No.		123		
LM End	12.19	Issue Type +	Ma	Location *				
Category	Suppleme	ental		GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	P LMA Respo	onsibility	39.4351	69°	39.435169°		
пеш				-121.7652	90°	-121.765290°		
DWR ID	16334							

Inspector Comment

Comment Code

FS_ID:52234 DS_ID:16334 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 WS pipe end still unknown- try to locate using GPR/ utility locator. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Cannot locate the WS pipe end. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition but could not locate the WS pipe end.7/13/2015 New screw gate installed inside the WS standpipe. 5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. Still no sign of WS end of pipe.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. WS outlet of pipe not found. Need photos of cleared WS and LS slopes. Determine if WS outlet daylights after WS slope is cleared.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 11 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 12.38)] FS Date: 6/19/2017 1:22:23 PM

LM Start	12.19	Rating **	М	Issue No.	123 (cont)
LM End	12.19	Issue Type +	Ma	Location *	



Overview of levee crown at crossing looking downstream.

Photo 2 of 3: UCIP_FA_2018_52234_66936.jpg



View of Ws slope and channel.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence C: Enforcement

* Issue Type

Ma: Maintenance Deficiancy Ob: Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	12.19	Rating **	М	Issue No.		123 (cont)
LM End	12.19	Issue Type +	Ма	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.43516	9°	39.435169°
пеш				-121.76529	o°	-121.765290 °
DWR ID	16334					·

Inspector Comment

Comment Code

FS_ID:52234 DS_ID:16334 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 WS pipe end still unknown- try to locate using GPR/ utility locator. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Cannot locate the WS pipe end. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition but could not locate the WS pipe end.7/13/2015 New screw gate installed inside the WS standpipe. 5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. Still no sign of WS end of pipe.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. WS outlet of pipe not found. Need photos of cleared WS and LS slopes. Determine if WS outlet daylights after WS slope is cleared.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 11 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 12.38)] FS Date: 6/19/2017 1:22:23 PM



Slide gate located on WS slope.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	12.19	Rating **	A/W	Issue No.		124	
LM End	12.19	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS La	atituc	de/Longitude	
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	onsibility	39.4351	52°	39.435152°	
пеш				-121.7653	00°	-121.765300°	
DWR ID	16335						

Inspector Comment

Comment Code

FS ID:52235 DS_ID:16335 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

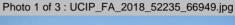
UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing

appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 LS slope

has been cleared of vegetation and is in good condition.4/18/2012 Limited inspection on LS slope due to dry vegetation. Need photos of cleared LS slope.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.8 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). This crossing is used as an irrigation turnout bar code plate located on the WS slide gate (identified as 144). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 12.38)] FS Date: 6/19/2017 1:26:05 PM

12.19 Rating ** A/W Issue No. 124 (cont) LM Start Location ' LM End 12.19 Issue Type + Ма





Overview of levee crown at crossing looking downstream.

Photo 2 of 3: UCIP_FA_2018_52235_66947.jpg



View from levee crown of WS slope and channel.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	12.19	Rating **	A/W	Issue No.		124 (cont)	
LM End	12.19	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS La	tituc	le/Longitude	
Calegory				Start		End	
Item	DWR UCI	IP LMA Respo	onsibility	39.43515	2 °	39.435152	0
пеш				-121.76530	0°	-121.765300	0
DWR ID	16335						

Comment Code

Inspector Comment

FS ID:52235 DS_ID:16335 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing

appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 LS slope

has been cleared of vegetation and is in good condition.4/18/2012 Limited inspection on LS slope due to dry vegetation. Need photos of cleared LS slope.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.8 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). This crossing is used as an irrigation turnout bar code plate located on the WS slide gate (identified as 144). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 12.38)] FS Date: 6/19/2017 1:26:05 PM

Photo 3 of 3: UCIP_FA_2018_52235_66948.jpg



Water side screw gate located near crown hinge

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	12.74	Rating **	М	Issue No.		125
LM End	12.74	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.42807	o°	39.428070 °
пеш				-121.77008	o°	-121.770080 °
DWR ID	16336					

Inspector Comment

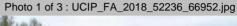
Comment Code

FS ID:52236 DS_ID:16336 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Slide gate still missing from inside of WS standpipe. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Slide gate still missing from inside the WS standpipe. (DWR Sutter Yard- AFreitag)4/28/2016 Slide gate was removed from inside the WS standpipe.7/13/2015 New screw gate installed on the WS pipe end in the irrigation ditch.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Irrigation turnout. Not in use during April 2012 Inspection. During the follow up May 2012 Inspection structure was being used as irrigation turnout, reason for barcode tags. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 10.7 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwalls on both ends. This crossing is used as an irrigation turnout bar code plate located on the WS slide gate (identified as 141 and 142). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 12.94)] FS Date: 6/19/2017 1:28:43 PM

LM Start	12.74	Rating **	М	Issue No.	125 (cont)
LM End	12.74	Issue Type +	Ma	Location *	





Overview picture looking south on right bank of Cherokee Canal.

Photo 2 of 3: UCIP_FA_2018_52236_66959.jpg



View of WS slope.

Location + Issue Type LS: Land Side N/A: Not Applicable Acceptable N : Not Inspected/Rated Ma: Maintenance Deficiancy WS: Water Side Minimally Acceptable Ob : Design & System Obsolescence C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	12.74	Rating **	М	Issue No.	125 (cont)		
LM End	12.74	Issue Type +	Ма	Location *			
Supplemental			GPS Latitude/Longitude				
Calegory	Category				Start		
Item	DWR UCI	IP LMA Respo	nsibility	39.42807	°	39.428070	0
пеш				-121.77008	°	-121.770080	0
DWR ID	16336						

Inspector Comment

Comment Code

FS_ID:52236 DS_ID:16336 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Slide gate still missing from inside of WS standpipe. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Slide gate still missing from inside the WS standpipe. (DWR Sutter Yard- AFreitag)4/28/2016 Slide gate was removed from inside the WS standpipe.7/13/2015 New screw gate installed on the WS pipe end in the irrigation ditch.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Irrigation turnout. Not in use during April 2012 Inspection. During the follow up May 2012 Inspection structure was being used as irrigation turnout, reason for barcode tags. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 10.7 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U' headwalls on both ends. This crossing is used as an irrigation turnout bar code plate located on the WS slide gate (identified as 141 and 142). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 12.94)] FS Date: 6/19/2017 1:28:43 PM



Slide gate located on WS slope. Owner information marked on gate.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	13.33	Rating **	A/W	Issue No.		127
LM End	13.33	Issue Type +	Ма	Location *		
Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.42066	67°	39.420667 °
пеш				-121.77570	00°	-121.775700°
DWR ID	16337					

Inspector Comment

Comment Code

FS_ID:52238 DS_ID:16337 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Ws pipe end was submerged but crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 New screwgate installed inside of WS standpipe.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.1 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.53)] FS Date: 6/19/2017 1:33:59 PM

LM Start	13.33	Rating **	A/W	Issue No.	127 (cont)
LM End	13.33	Issue Type +	Ma	Location *	



Overview of levee crown at crossing looking downstream.

Photo 2 of 3: UCIP_FA_2018_52238_66963.jpg



View of WS slope.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	13.33	Rating **	A/W	Issue No.		127 (cont)
LM End	13.33	Issue Type +	Ма	Location *		
Category			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.4206	67°	39.420667°
пеш				-121.77570	00°	-121.775700°
DWR ID	16337					

Inspector Comment

Comment Code

FS_ID:52238 DS_ID:16337 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Ws pipe end was submerged but crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 New screwgate installed inside of WS standpipe.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.1 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.53)] FS Date: 6/19/2017 1:33:59 PM



View of WS slope and channel.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	13.76	Rating **	М	Issue No.	128		
LM End	13.76	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start End			
Item	DWR UCI	P LMA Respo	nsibility	39.4168	33 °	39.416833°	
пеш				-121.7819	30°	-121.781930 °	
DWR ID	16338						
Comment Code							

Inspector Comment

FS_ID:53315 DS_ID:16338 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 WS flapgate has been replaced. LS outlet still has a lot of vegetation, but overall levee integrity looks good at time of this inspection. Downgrading to Non-Urgent from Urgent due to fixed flapgate and current levee condtion (D. Sanoski - DWR UCIP).6/15/2017 Not abandoned- WS flapgate was dug out and opened draining water from the LS ditch. WS flapgate is heavily corroded and has a broken hinge- needs to be replaced. LS is still very overgrown and needs to be cleared. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Appears abandoned. WS flap gate completely silted over and LS screw gate is completely overgrown by a tree and is not accessible for inspection. (DWR Sutter Yard-AFreitag)5/3/2016 Crossing appears to be abandoned. WS flap gate was completely silted over and LS slide gate is very overgrown by a tree.7/13/2015 WS flap gate is blocked from opening by sediment and vegetation. Needs to be cleared away. LS opening is being over grown by a tree and needs to be cutback.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Tree has fallen at LS inlet and damaged slide gate. The tree needs to be removed and screw gate repaired.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.7 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.96)]

FS Date: 8/23/2018 2:42:00 PM

Limited inspection on LS due to fallen tree.



WS headwall and flap gate.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	13.76	Rating **	М	Issue No.	128 (cont)		
LM End	13.76	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory		Start				End	
Item	DWR UCI	P LMA Respo	nsibility	39.41683	3°	39.416833°	
пеш			-121.78193	o°	-121.781930°		
DWR ID	ID 16338						
	Comment Code						

Inspector Comment

FS_ID:53315 DS_ID:16338 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 WS flapgate has been replaced. LS outlet still has a lot of vegetation, but overall levee integrity looks good at time of this inspection. Downgrading to Non-Urgent from Urgent due to fixed flapgate and current levee condtion (D. Sanoski - DWR UCIP).6/15/2017 Not abandoned- WS flapgate was dug out and opened draining water from the LS ditch. WS flapgate is heavily corroded and has a broken hinge- needs to be replaced. LS is still very overgrown and needs to be cleared. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Appears abandoned. WS flap gate completely silted over and LS screw gate is completely overgrown by a tree and is not accessible for inspection. (DWR Sutter Yard-AFreitag)5/3/2016 Crossing appears to be abandoned. WS flap gate was completely silted over and LS slide gate is very overgrown by a tree.7/13/2015 WS flap gate is blocked from opening by sediment and vegetation. Needs to be cleared away. LS opening is being over grown by a tree and needs to be cutback.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Tree has fallen at LS inlet and damaged slide gate. The tree needs to be removed and screw gate repaired.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.7 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.96)]
FS Date: 8/23/2018 2:42:00 PM

Limited inspection on LS due to fallen tree.

Photo 2 of 3: UCIP_FA_2018_53315_66971.jpg



View of channel at crossing.

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Flood Control Project Maintenance Levee Inspections

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	13.76	Rating **	М	Issue No.		128 (cont)
LM End	13.76	Issue Type +	Ма	Location *		
Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.41683	3°	39.416833°
пеш				-121.78193	o°	-121.781930 °
DWR ID	16338					·

Comment Code Inspector Comment

FS_ID:53315 DS_ID:16338 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 WS flapgate has been replaced. LS outlet still has a lot of vegetation, but overall levee integrity looks good at time of this inspection. Downgrading to Non-Urgent from Urgent due to fixed flapgate and current levee condtion (D. Sanoski - DWR UCIP).6/15/2017 Not abandoned- WS flapgate was dug out and opened draining water from the LS ditch. WS flapgate is heavily corroded and has a broken hinge- needs to be replaced. LS is still very overgrown and needs to be cleared. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Appears abandoned. WS flap gate completely silted over and LS screw gate is completely overgrown by a tree and is not accessible for inspection. (DWR Sutter Yard-AFreitag)5/3/2016 Crossing appears to be abandoned. WS flap gate was completely silted over and LS slide gate is very overgrown by a tree.7/13/2015 WS flap gate is blocked from opening by sediment and vegetation. Needs to be cleared away. LS opening is being over grown by a tree and needs to be cutback.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Tree has fallen at LS inlet and damaged slide gate. The tree needs to be removed and screw gate repaired. Limited inspection on LS due to fallen tree.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.7 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.96)]

FS Date: 8/23/2018 2:42:00 PM



Tree fallen at LS headwall.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	13.77	Rating **	М	Issue No.		129
LM End	13.77	Issue Type +	Ма	Location *		
Catagony	Category Supplemental			GPS La	e/Longitude	
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.41675	6°	39.416756°
пеш			-121.78206	0°	-121.782060 °	
DWR ID	16339					·

Comment Code Inspector Comment

FS_ID:52240 DS_ID:16339 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Abandoned- still only the structure on the WS shoulder found. (DWR Sutter Yard- AFreitag)11/17/2016 Abandoned. (DWR Sutter Yard- AFreitag)5/03/2016 ABANDONED CROSSING7/13/2015 Abandoned crossing. Slide gate is buried on the WS.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Nonfunctional crossing-buried slide gate on WS. Limited inspeciton on WS and LS slope/toe due to dense vegetation. Need photo of cleared WS & LS slopes or toe.This crossing is listed in the USACE periodic inspection report as Corp's Inspection ID#

USACE_CESPK_M13D_2011_p_0352 for abandoned gate on WS

FIELD_STRUCT_DESC: *ABANDONED* 12-inch steel drainage pipe through the levee, 3 feet below the crown. Gate valve on the waterside (WS) slope. 0.25-inch steel plate welded on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.97)]

FS Date: 6/19/2017 1:53:35 PM

LM Start	13.77	Rating **	М	Issue No.	129 (cont)
LM End	13.77	Issue Type +	Ma	Location *	



Buried slide gate on the WS slope.

Photo 2 of 2: UCIP_FA_2018_52240_66973.jpg



View of LS slope and toe. Unable to find welded plate on LS.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	14.58	Rating **	U	Issue No.		130		
LM End	14.58	Issue Type +	Ma	Location *				
Category				GPS Latitude/Longitude				
Category			Start		End			
ltom	DWR UC	IP LMA Respo	nsibility	39.4094	81 °	39.409481°		
пеш	Item			-121.7940	10°	-121.794010°		
DWR ID	16368				,			
	Comment Code							

Inspector Comment

FS_ID:53317 DS_ID:16368 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 WS pipe unable to be inspected due to heavy vegetation at inlet, so assume same as last inspection. Noticed a long crack a couple feet above WS headwall that could be of concern: possible future slough if soil gets saturated during next high water event and could be a sign of internal pipe degredation. LS outlet and slope looked good. Urgent due to long crack, obstructed inspection view of WS inlet, and 2016 photos of holes in pipe (D. Sanoski - DWR UCIP).6/15/2017 WS pipe end still showing heavy signs of corrosion and deterioration with visible holes between the concrete headwall and flap gate flange. Pipe was almost 100% full of water so could not visually inspect inside of the pipe to see if theres any damage inside of the levee segment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Top of pipe on WS still showing heavy signs of corrosion with visible holes between the flapgate flange and the concrete headwall. The pipe was mostly underwater so could not internally inspect it for more damage or corrosion. (DWR Sutter Yard-AFreitag)5/03/2016 Top of the pipe on the WS has holes in it between the flapgate flange and headwall. Crossing is showing signs of rust and deterioation but it was mostly underwater so could not inspect the inside of the pipe. (DWR Sutter Yard - afreitag)7/13/2015 Both sides of crossing were underwater at the time of inspection. (DWR Sutter Yard afreitag)5/22/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/3/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS flapgate is still lodged open. (DWR Sutter Yard afreitag)4/18/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared WS & LS slopes. The flap gate is lodged open. (DWR UCIP - omagana)

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 14.79)] FS Date: 8/23/2018 9:14:00 AM



Headwall and flapgate located on water side of levee

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	14.58	Rating **	U	Issue No.		130 (cont)			
LM End	14.58	Issue Type +	Ма	Location *					
Catagony	Category Supplemental			Supplemental			GPS Lat	ituc	le/Longitude
Calegory				Start		End			
Item	DWR UCI	P LMA Respo	nsibility	39.40948	1°	39.409481 °			
пеш				-121.79401	o°	-121.794010°			
DWR ID	16368								

Inspector Comment

Comment Code

FS_ID:53317 DS_ID:16368 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 WS pipe unable to be inspected due to heavy vegetation at inlet, so assume same as last inspection. Noticed a long crack a couple feet above WS headwall that could be of concern: possible future slough if soil gets saturated during next high water event and could be a sign of internal pipe degredation. LS outlet and slope looked good. Urgent due to long crack, obstructed inspection view of WS inlet, and 2016 photos of holes in pipe (D. Sanoski - DWR UCIP).6/15/2017 WS pipe end still showing heavy signs of corrosion and deterioration with visible holes between the concrete headwall and flap gate flange. Pipe was almost 100% full of water so could not visually inspect inside of the pipe to see if theres any damage inside of the levee segment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Top of pipe on WS still showing heavy signs of corrosion with visible holes between the flapgate flange and the concrete headwall. The pipe was mostly underwater so could not internally inspect it for more damage or corrosion. (DWR Sutter Yard-AFreitag)5/03/2016 Top of the pipe on the WS has holes in it between the flapgate flange and headwall. Crossing is showing signs of rust and deterioation but it was mostly underwater so could not inspect the inside of the pipe. (DWR Sutter Yard - afreitag)7/13/2015 Both sides of crossing were underwater at the time of inspection. (DWR Sutter Yard afreitag)5/22/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/3/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS flapgate is still lodged open. (DWR Sutter Yard afreitag)4/18/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared WS & LS slopes. The flap gate is lodged open. (DWR UCIP - omagana)

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 14.79)] FS Date: 8/23/2018 9:14:00 AM

Photo 2 of 3: UCIP_FA_2018_53317_66974.jpg



Headwall and flapgate located on water side of levee

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	14.58	Rating **	U	Issue No.		130 (cont)
LM End	14.58	Issue Type +	Ма	Location *		
Catagony	Category Supplemental			GPS Lat	le/Longitude	
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.40948	1°	39.409481 °
пеш				-121.79401	o°	-121.794010 °
DWR ID	16368					

Inspector Comment

Comment Code

FS_ID:53317 DS_ID:16368 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 WS pipe unable to be inspected due to heavy vegetation at inlet, so assume same as last inspection. Noticed a long crack a couple feet above WS headwall that could be of concern: possible future slough if soil gets saturated during next high water event and could be a sign of internal pipe degredation. LS outlet and slope looked good. Urgent due to long crack, obstructed inspection view of WS inlet, and 2016 photos of holes in pipe (D. Sanoski - DWR UCIP).6/15/2017 WS pipe end still showing heavy signs of corrosion and deterioration with visible holes between the concrete headwall and flap gate flange. Pipe was almost 100% full of water so could not visually inspect inside of the pipe to see if theres any damage inside of the levee segment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Top of pipe on WS still showing heavy signs of corrosion with visible holes between the flapgate flange and the concrete headwall. The pipe was mostly underwater so could not internally inspect it for more damage or corrosion. (DWR Sutter Yard-AFreitag)5/03/2016 Top of the pipe on the WS has holes in it between the flapgate flange and headwall. Crossing is showing signs of rust and deterioation but it was mostly underwater so could not inspect the inside of the pipe. (DWR Sutter Yard - afreitag)7/13/2015 Both sides of crossing were underwater at the time of inspection. (DWR Sutter Yard afreitag)5/22/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/3/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS flapgate is still lodged open. (DWR Sutter Yard afreitag)4/18/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared WS & LS slopes. The flap gate is lodged open. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe

through the levee, 12.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 14.79)] FS Date: 8/23/2018 9:14:00 AM

Photo 3 of 3: UCIP_FA_2018_53317_66975.jpg



Head wall and screw gate located on land side of levee

N : Not Inspected/Rated C : Corrected + Issue Type
Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	14.91	Rating **	A/W	Issue No.		131
LM End	14.91	Issue Type +	Ма	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory			Start		End	
Item	DWR UCIP LMA Responsibility				70°	39.406570°
item				-121.7987	70°	-121.798770°
DWR ID	16367					

Inspector Comment

Comment Code

FS_ID:52242 DS_ID:16367 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/22/2014 Same as last inspection 7/15/2013. Same as last inspection 7/15/2013. Same

inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. Need overall photo of crossing and photos of cleared WS & LS slopes. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.4 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS). Flap gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.12)]

FS Date: 6/19/2017 2:01:26 PM

LM Start	14.91	Rating **	A/W	Issue No.	131 (cont)
LM End	14.91	Issue Type +	Ma	Location *	



WS headwall and flapgate

Photo 2 of 3: UCIP_FA_2018_52242_66980.jpg



Slide gate located on LS toe. Dense vegetation present on LS slope.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	14.91	Rating **	A/W	Issue No.		131 (cont)
LM End	14.91	Issue Type +	Ма	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory			Start		End	
DWR UCIP LMA Responsibility				39.40657	° 0	39.406570°
пеш				-121.79877	° o	-121.798770°
DWR ID	16367					

Inspector Comment

Comment Code

FS ID:52242 DS_ID:16367 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/22/2014 Same as last

inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. Need overall photo of crossing and photos of cleared WS & LS slopes. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.4 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS). Flap gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.12)]

FS Date: 6/19/2017 2:01:26 PM



WS slope cleared of vegetation

LM Start	15.58	Rating **	М	Issue No.		57	
LM End	15.58	Issue Type +	Ma	Location *		LS	
Category Earthen Levee			GPS Latitude/Longitude				
Category				Start		End	
Item	Item Slope Stability				80°	39.400380°	
item					32°	-121.808432 °	
DWR ID	DWR_MA0	013_01_f _ 201	6_57				
Comment Code							
S1 : Repair slope instability.							

Inspector Comment



View of slope instability along the landside slope.

Location + Issue Type N/A: Not Applicable LS: Land Side Acceptable N: Not Inspected/Rated Ma: Maintenance Deficiancy WS: Water Side Minimally Acceptable Ob : Design & System Obsolescence C : Corrected U : Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	16.19	Rating ** A/W		Issue No.		134		
LM End	16.19	Issue Type +	Ма	Location *				
Category				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	nsibility	39.39474	48 °	39.394748°			
пеш				-121.81736	60°	-121.817360 °		
DWR ID	16372							

Inspector Comment

Comment Code

FS_ID:52245 DS_ID:16372 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)5/03/2016 Crossing appears to be in good condition. 7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same

inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 The structures are closed with metal stop logs (weir type structure). The stop logs appear to be removable, however; there is a wooden bridge over the structure that would have to be removed in order to raise the stop logs. There is 1-foot of clearance between the bottom of the bridge and the top of the stop logs. FIELD_STRUCT_DESC: Two 10-foot by 10-foot concrete drain openings through the levee at an unknown depth below the crown. Wooden bridge, 10 ton load limit. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 16.43)]

FS Date: 6/19/2017 2:09:30 PM

LM Start	16.19	Rating **	A/W	Issue No.	134 (cont)
LM End	16.19	Issue Type +	Ma	Location *	



WS view of structure.

Photo 2 of 3: UCIP_FA_2018_52245_74503.jpg



View of crossing and panels attached to concrete walls.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	16.19	Rating **	A/W	Issue No.		134 (cont)		
LM End	16.19	Issue Type +	Ma	Location *				
Category Supplemental				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	P LMA Respo	onsibility	39.3947	48 °	39.394748°		
пеш				-121.8173	60°	-121.817360°		
DWR ID	16372					·		

Inspector Comment

Comment Code

FS_ID:52245 DS_ID:16372 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing

appears to be in good condition. (DWR Sutter Yard-AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as

inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 The structures are closed with metal stop logs (weir type structure). The stop logs appear to be removable, however; there is a wooden bridge over the structure that would have to be removed in order to raise the stop logs. There is 1-foot of clearance between the bottom of the bridge and the top of the stop logs. FIELD_STRUCT_DESC: Two 10-foot by 10-foot concrete drain openings through the levee at an unknown depth below the crown. Wooden bridge, 10 ton load limit. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 16.43)]

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Photo 3 of 3 : UCIP_FA_2018_52245_74501.jpg



LS view of structure

LM Start	16.52	Rating **	М	Issue No.		56	
LM End	16.52	Issue Type +	Ma	Location *		LS	
Category Earthen Levee				GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Trim / Thi	n Trees		39.3916	75°	39.391675°	
item				-121.8219	32°	-121.821932°	
DWR ID DWR_MA0013_01_f _ 2016_56							
	Comment Code						

T1 : Trim trees to at least five feet above ground level.

Inspector Comment

Photo 1 of 1 : FA_2018_MA0013_300_56_20180905_00008.jpg



View of dense trees along the landside toe.

* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

** Rating
A: Acceptable
N: Not Inspected/Rated
M: Minimally Acceptable
C: Corrected
D: Unacceptable
AW: Acceptable
AW: Acceptable but Monitor & Maintain

** Rating
A: Issue Type
Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	17.23	Rating **	М	Issue No.		136
LM End	17.23	Issue Type +	Ма	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.38517	2°	39.385172°
пеш			-121.83206	o°	-121.832060 °	
DWR ID	16369					

Inspector Comment

Comment Code

FS_ID:52249 DS_ID:16369 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Flapgate bolted shut. Hinges seem very stiff to operateas gate will not fully close and has baout a 1/2" gap near the top. Land owner claims the gate leaks during high water times. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 WS flap gate is blocked from opening by sediment. Needs to be dug out.5/22/2014 Same as last inspection.12/3/2013 Sediment was dug out from WS flapgate allowing it to open.7/15/2013 Slopes have been sprayed and cleared of vegetation and are in good condition. WS flapgate is blocked from opening by sediment buildup.4/18/2012 Limited inspection on WS and LS slope due to dense vegatation and steep slopes. Need photos of cleared WS & LS slopes.

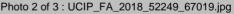
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.1 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwalls on both WS and landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 17.47)]

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LM Start	17.23	Rating **	М	Issue No.	136 (cont)
LM End	17.23	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2018_52249_67017.jpg

View of WS slope and toe.





View of WS headwall and flap gate.

* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

** Rating

A : Acceptable N : Not Inspected/Rated M: Maintenance Deficiancy

M : Minimally Acceptable CR : Corrected Ob: Design & System Obsolescence

U : Unacceptable A/W : Acceptable but Monitor & Maintain

** Rating

A : Not Inspected/Rated M: Maintenance Deficiancy

Ob: Design & System Obsolescence

En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	17.23	Rating **	М	Issue No.		136 (cont)
LM End	17.23	Issue Type +	Ма	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.38517	'2 °	39.385172°
пеш					0°	-121.832060 °
DWR ID	16369					·

Inspector Comment

Comment Code

FS_ID:52249 DS_ID:16369 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Flapgate bolted shut. Hinges seem very stiff to operateas gate will not fully close and has baout a 1/2" gap near the top. Land owner claims the gate leaks during high water times. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 WS flap gate is blocked from opening by sediment. Needs to be dug out.5/22/2014 Same as last inspection.12/3/2013 Sediment was dug out from WS flapgate allowing it to open.7/15/2013 Slopes have been sprayed and cleared of vegetation and are in good condition. WS flapgate is blocked from opening by sediment buildup.4/18/2012 Limited inspection on WS and LS slope due to dense vegatation and steep slopes. Need photos of cleared WS & LS slopes.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.1 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwalls on both WS and landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 17.47)]

FS Date: 6/19/2017 2:20:18 PM



View of LS headwall.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	0.05	Rating **	М	Issue No.		912		
LM End	0.05	Issue Type +	Ma	Location *				
Category	ental	GPS Latitude/Longitude						
Calegory				Start	End			
Item	DWR UCI	P LMA Respo	nsibility	39.5738	16°	39.573816°		
item				-121.7012	90°	-121.701290°		
DWR ID	(R ID 16397							
Comment Code								

Inspector Comment

FS_ID:52111 DS_ID:16397 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing apperas to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. 4inch pipe still present on LS but it does not affect the function of the crossing. (DWR Sutter Yard- AFreitag)9/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--sleeved pipe does not prevent flap gate from closing on WS. Still need to coordinate with owner to remove sleeved pipe through existing crossing per Title 23. (DWR UCIP - omagana)4/27/2016 Crossing appears to be in good condition. 4 inch pipe is still present in LS opening but does not go all the was through to the WS. (DWR Sutter Yard afreitag)7/01/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard - afreitag)5/29/2014 Same as last inspection. (DWR Sutter Yard - afreitag) 12/9/2013 4in. Pipe was removed and flapgate is closed and ready for high water. (DWR Sutter Yard - afreitag)7/10/2013 Same as last inspection. Urgency rating carry over from last entry. (DWR Sutter Yard afreitag)4/19/2012 4-6 inch pipe is not part of original crossing-remove pipe. WS-pipe stockpile on WS slope. LS-Overgrown branches limit inspection. This crossing was listed in the USACE Periodic Inspection report listed as Corp's Inspect ID# USACE CESPK M13G 2011 p 0009 for WS flap gate not functioning

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 6 feet below the crown. Concrete "U" headwalls on both WS and landside (LS). Flap gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 0.04].

properly as irrigation pipe passes inside crossing. (DWR UCIP -

FS Date: 6/7/2017 12:00:22 PM

omagana)



Overview looking south on left levee

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	0.05	Rating **	М	Issue No.	912 (cont)			
LM End	0.05	Issue Type +	Ма	Location *				
Supplemental				GPS Latitude/Longitude				
Calegory				Start End				
Item	DWR UCI	P LMA Respo	nsibility	39.5738	16°	39.573816°		
item				-121.7012	90°	-121.701290°		
DWR ID	DWR ID 16397							
Comment Code								

Inspector Comment

FS_ID:52111 DS_ID:16397 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing apperas to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. 4inch pipe still present on LS but it does not affect the function of the crossing. (DWR Sutter Yard- AFreitag)9/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--sleeved pipe does not prevent flap gate from closing on WS. Still need to coordinate with owner to remove sleeved pipe through existing crossing per Title 23. (DWR UCIP - omagana)4/27/2016 Crossing appears to be in good condition. 4 inch pipe is still present in LS opening but does not go all the was through to the WS. (DWR Sutter Yard afreitag)7/01/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard - afreitag)5/29/2014 Same as last inspection. (DWR Sutter Yard - afreitag) 12/9/2013 4in. Pipe was removed and flapgate is closed and ready for high water. (DWR Sutter Yard - afreitag)7/10/2013 Same as last inspection. Urgency rating carry over from last entry. (DWR Sutter Yard afreitag)4/19/2012 4-6 inch pipe is not part of original crossing-remove pipe. WS-pipe stockpile on WS slope. LS-Overgrown branches limit inspection. This crossing was listed in the USACE Periodic Inspection report listed as Corp's Inspect ID# USACE CESPK M13G 2011 p 0009 for WS flap gate not functioning

omagana)
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe
through the levee, 6 feet below the crown. Concrete "U" headwalls on
both WS and landside (LS). Flap gate on the waterside (WS) end.
[Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento
O&M Manual 519, June 1962 (HLM 0.04].

properly as irrigation pipe passes inside crossing. (DWR UCIP -

FS Date: 6/7/2017 12:00:22 PM



Headwall and flap gate on WS. Soil and pipes stockpiled next to headwall

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	0.05	Rating **	М	Issue No.		912 (cont)		
LM End	0.05	Issue Type +	Ма	Location *				
Category				GPS Latitude/Longitude				
Category	Category			Start		End		
Item	DWR UCI	P LMA Respo	onsibility	39.57381	6°	39.573816°		
пеш			-121.70129	o°	-121.701290°			
DWR ID	16397							

Comment Code Inspector Comment

FS_ID:52111 DS_ID:16397 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing apperas to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. 4inch pipe still present on LS but it does not affect the function of the crossing. (DWR Sutter Yard- AFreitag)9/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--sleeved pipe does not prevent flap gate from closing on WS. Still need to coordinate with owner to remove sleeved pipe through existing crossing per Title 23. (DWR UCIP - omagana)4/27/2016 Crossing appears to be in good condition. 4 inch pipe is still present in LS opening but does not go all the was through to the WS. (DWR Sutter Yard afreitag)7/01/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard - afreitag)5/29/2014 Same as last inspection. (DWR Sutter Yard - afreitag) 12/9/2013 4in. Pipe was removed and flapgate is closed and ready for high water. (DWR Sutter Yard - afreitag)7/10/2013 Same as last inspection. Urgency rating carry over from last entry. (DWR Sutter Yard afreitag)4/19/2012 4-6 inch pipe is not part of original crossing-remove pipe. WS-pipe stockpile on WS slope. LS-Overgrown branches limit inspection. This crossing was listed in the USACE Periodic Inspection report listed as Corp's Inspect ID# USACE CESPK M13G 2011 p 0009 for WS flap gate not functioning

properly as irrigation pipe passes inside crossing. (DWR UCIP - omagana)
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 6 feet below the crown. Concrete "U" headwalls on both WS and landside (LS). Flap gate on the waterside (WS) end.

[Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 0.04].

FS Date: 6/7/2017 12:00:22 PM



LS headwall blocked by overgrown branches.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	0.06	Rating **	М	Issue No.		50	
LM End	0.06	Issue Type +	Ма	Location *		WS	
Category	Earthen L	evee		GPS Latitude/Longitude			
Calegory				Start		End	
Item	Trim / Thin Trees				92°	39.573692°	
пеш	-121.701286 ° -12					-121.701286°	
DWR ID DWR_MA0013_02_f _ 2016_50							
		Comn	nent Cod	le			
T3 : Trim a flood fight.		es to allow vis	sibility of	the ground	l and	I room to	
		Inspecto	or Comm	ent			

No Photos

* Location

LS: Land Side N/A: Not Applicable

WS: Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	0.58	Rating **	М	Issue No.		913		
LM End	0.58	Issue Type +	Ма	Location *				
Category Supplemental				GPS La	atitud	e/Longitude		
				Start		End		
Item	DWR UCI	P LMA Respo	nsibility	39.566479°		39.566479°		
item				-121.702430°		-121.702430°		
DWR ID	DWR ID 16398							
Comment Code								

Inspector Comment

FS_ID:52112 DS_ID:16398 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 LS ditch at outlet is getting over grown with vegetation. WS near concrete standpipe is overgrown with vegetation. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Between the screwgate on the WS shoulder and the LS pipe end the pipe is about 50% full of soil. Crossing is still actively used by landowner for irrigation purposes. (DWR Sutter Yard-AFreitag)4/27/2016 Pipe gets used by the landowner to irrigate his rice fields. It appeared to be in good condition.7/01/2015 LS pipe end is still about 50% full of sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition. LS pipe end is half full of sediment. Sediment inside of WS standpipe may hinder slide gate from fully closing. Standpipe cover is still broken.4/19/2012 Need to fix the top of slide gate cover. The wooden cap on standpipe is broken. Limited evaluation of crossing due to dense vegetation on LS slope. Need photos of cleared slopes during fall inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.6 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). 36-inch concrete standpipe in the channel with two wooden piles to deflect debris. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 0.57)]

Manual 519, June 1962 (HLM 0.57 FS Date: 6/7/2017 12:03:30 PM



Overview looking south

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	0.58	Rating **	М	Issue No.		913 (cont)		
LM End	0.58	Issue Type +	Ma	Location *				
Category			GPS Latitude/Longitude					
Category				Start		End		
Item	DWR UCI	P LMA Respo	onsibility	39.5664	79°	39.566479°		
item				-121.7024	30°	-121.702430 °		
DWR ID	16398							
Comment Code								

Inspector Comment

FS_ID:52112 DS_ID:16398 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 LS ditch at outlet is getting over grown with vegetation. WS near concrete standpipe is overgrown with vegetation. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Between the screwgate on the WS shoulder and the LS pipe end the pipe is about 50% full of soil. Crossing is still actively used by landowner for irrigation purposes. (DWR Sutter Yard-AFreitag)4/27/2016 Pipe gets used by the landowner to irrigate his rice fields. It appeared to be in good condition.7/01/2015 LS pipe end is still about 50% full of sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition. LS pipe end is half full of sediment. Sediment inside of WS standpipe may hinder slide gate from fully closing. Standpipe cover is still broken.4/19/2012 Need to fix the top of slide gate cover. The wooden cap on standpipe is broken. Limited evaluation of crossing due to dense vegetation on LS slope. Need photos of cleared slopes during fall inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.6 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). 36-inch concrete standpipe in the channel with two wooden piles to deflect debris. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 0.57)] FS Date: 6/7/2017 12:03:30 PM Photo 2 of 3: UCIP_FA_2018_52112_67048.jpg



View of WS slope and toe.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	0.58	Rating **	М	Issue No.		913 (cont)		
LM End	0.58	Issue Type +	Ма	Location *				
Supplemental				GPS Latitude/Longitude				
Calegory	Category					End		
Item	DWR UCI	P LMA Respo	nsibility	39.5664	79°	39.566479°		
пеш				-121.7024	30°	-121.702430 °		
DWR ID	ID 16398							
Comment Code								

Inspector Comment

FS_ID:52112 DS_ID:16398 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 LS ditch at outlet is getting over grown with vegetation. WS near concrete standpipe is overgrown with vegetation. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Between the screwgate on the WS shoulder and the LS pipe end the pipe is about 50% full of soil. Crossing is still actively used by landowner for irrigation purposes. (DWR Sutter Yard-AFreitag)4/27/2016 Pipe gets used by the landowner to irrigate his rice fields. It appeared to be in good condition.7/01/2015 LS pipe end is still about 50% full of sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition. LS pipe end is half full of sediment. Sediment inside of WS standpipe may hinder slide gate from fully closing. Standpipe cover is still broken.4/19/2012 Need to fix the top of slide gate cover. The wooden cap on standpipe is broken. Limited evaluation of crossing due to dense vegetation on LS slope. Need photos of cleared slopes during fall inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.6 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). 36-inch concrete standpipe in the channel with two wooden piles to deflect debris. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 0.57)] FS Date: 6/7/2017 12:03:30 PM Photo 3 of 3: UCIP_FA_2018_52112_67045.jpg



Screw gate located on WS of levee. Screw gate covers needs to be repaired.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	1.70	Rating **	М	Issue No.		914		
LM End	1.70	Issue Type +	Ма	Location *				
Category				GPS La	tituc	le/Longitude		
Category	Category					End		
Item	DWR UCI	P LMA Respo	nsibility	39.55117	'8°	39.551178°		
пеш				-121.70566	60°	-121.705660 °		
DWR ID	DWR ID 16399							
Comment Code								

Inspector Comment

FS_ID:52114 DS_ID:16399 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 LS slide gate stem is bent and the gate appears as if it will not open. LS inlet is becoming heavily vegetated next to rice field. WS flap gate is blocked shut by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 LS screw gate still bent and in-operable. (DWR Sutter Yard- AFreitag)4/27/2016 LS screw gate is still bent. Rest of crossing appeared in good condition.7/01/2015 LS screw gate frame is still twisted and hindering the gate from opening.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope is cleared of vegetation and is in good condition. LS screw gate frame

inspection. The 2015 Was sloped in specific to the condition of the condit

USACE_CESPK_M13G_2011_p_0108 for WS flap gate filled with soil and LS gate not functioning becasue of overgrown vegetation. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate at the LS toe in headwall. In 1962, permit number 3953 was issue for existing pump structure, intake box, ditch and power pole. In 1963, the pump and intake box were removed. (Permit No. 3953, 1960 - Dr. John O. Gibbs, DBA Empire Land Company) [Additional

Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.70)] FS Date: 6/7/2017 12:14:04 PM

Photo 1 of 3: UCIP_FA_2018_52114_67059.jpg



Overview of crossing

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	1.70	Rating **	М	Issue No.	914 (cont)			
LM End	1.70	Issue Type +	Ма	Location *				
Category	ental	GPS La	tituc	le/Longitude				
Calegory	Category					End		
Item	DWR UCI	P LMA Respo	nsibility	39.5511	78 °	39.551178°		
пеш				-121.7056	60°	-121.705660 °		
DWR ID	DWR ID 16399							
Comment Code								

Inspector Comment

FS_ID:52114 DS_ID:16399 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 LS slide gate stem is bent and the gate appears as if it will not open. LS inlet is becoming heavily vegetated next to rice field. WS flap gate is blocked shut by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 LS screw gate still bent and in-operable. (DWR Sutter Yard- AFreitag)4/27/2016 LS screw gate is still bent. Rest of crossing appeared in good condition.7/01/2015 LS screw gate frame is still twisted and hindering the gate from opening.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope is cleared of vegetation and is in good condition. LS screw gate frame is twisted and is preventing the gate from opening.4/19/2012 Limited inspection dense vegetation on WS. Need photos of clear WS slope & toe. Ditch present in channel? This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE_CESPK_M13G_2011_p_0108 for WS flap gate filled with soil and LS gate not functioning becasue of overgrown vegetation. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate at the LS toe in headwall. In 1962, permit number 3953 was

issue for existing pump structure, intake box, ditch and power pole. In 1963, the pump and intake box were removed. (Permit No. 3953, 1960 -

Dr. John O. Gibbs, DBA Empire Land Company) [Additional

Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.70)] FS Date: 6/7/2017 12:14:04 PM



View of flap gate on WS.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	1.70	Rating **	М	Issue No.	914 (cont)			
LM End	1.70	Issue Type +	Ма	Location *				
Category	ental	GPS Latitude/Longitude						
Calegory	egory					End		
Item	DWR UC	P LMA Respo	nsibility	39.5511	78°	39.551178°		
пеш	-121.705660 ° -121.70							
DWR ID	WR ID 16399							
Comment Code								

Inspector Comment

FS_ID:52114 DS_ID:16399 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 LS slide gate stem is bent and the gate appears as if it will not open. LS inlet is becoming heavily vegetated next to rice field. WS flap gate is blocked shut by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 LS screw gate still bent and in-operable. (DWR Sutter Yard- AFreitag)4/27/2016 LS screw gate is still bent. Rest of crossing appeared in good condition.7/01/2015 LS screw gate frame is still twisted and hindering the gate from opening.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope is cleared of vegetation and is in good condition. LS screw gate frame is twisted and is preventing the gate from opening.4/19/2012 Limited inspection dense vegetation on WS. Need photos of clear WS slope & toe. Ditch present in channel? This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE_CESPK_M13G_2011_p_0108 for WS flap gate filled with soil and LS gate not functioning becasue of overgrown vegetation. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate at the LS toe in headwall. In 1962, permit number 3953 was

issue for existing pump structure, intake box, ditch and power pole. In 1963, the pump and intake box were removed. (Permit No. 3953, 1960 -

Dr. John O. Gibbs, DBA Empire Land Company) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Photo 3 of 3: UCIP_FA_2018_52114_67057.jpg



View of WS toe.

Manual 519, June 1962 (HLM 1.70)] FS Date: 6/7/2017 12:14:04 PM

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	2.39	Rating **	Α	Issue No.		61		
LM End	2.39	Issue Type +	Ma	Location *	LS			
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Calegory				Start		End		
Item	Vegetatio	n		39.5411	53°	39.541153°		
iteiii				-121.7060	70°	-121.706070 °		
DWR ID	DWR_MA0	013_02_f _ 201	8_61					
		Comn	nent Cod	de				
V1 : Contre		rass and wee	ds on th	e levee slop	oes a	and		
Inspector Comment								
The vegetation was mowed on both slopes.								



View of the mowed vegetation on both slopes.

LM Start	2.53	Rating **	A/W	Issue No.	915			
LM End	2.53	Issue Type +	Ma	Location *				
Category	ental	GPS La	tituc	le/Longitude				
Calegory	legory					End		
Item	DWR UCI	P LMA Respo	nsibility	39.53919	95 °	39.539195°		
пеш				-121.70607	70°	-121.706070 °		
DWR ID 16400								
Comment Code								

Inspector Comment

FS_ID:52115 DS_ID:16400 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 LS inlet was underwater. WS flapgate blocked shut by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Sediment dug out from in front of flap gate.

Gate can now function properly. (DWR Sutter Yard-AFreitag)4/27/2016 WS flapgate still blocked from opening by sediment buildup.7/01/2015 New screwgate installed on the LS. WS flapgate is still blocked from opening by sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 Sediment is built up against WS flap gate not allowing it to open.

Handle for LS slide gate is still missing.4/19/2012 Handle missing on slide gate.

FIELD_STRUCT_DESC: 1 of 2: 36-inch corrugated metal drainage pipe through the levee, 9.7 feet below the crown. Concrete "U" headwalls located on the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.54)]

FS Date: 6/7/2017 12:18:14 PM

Photo 1 of 3: UCIP_FA_2018_52115_67063.jpg



Overview of levee crown looking south

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	2.53	Rating **	A/W	Issue No.	915 (cont)			
LM End	2.53	Issue Type +	Ма	Location *				
Category	ental	GPS La	tituc	de/Longitude				
Calegory	Category					End		
Item	DWR UCI	P LMA Respo	nsibility	39.53919	95 °	39.539195°		
пеш				-121.70607	70°	-121.706070°		
DWR ID 16400								
Comment Code								

Inspector Comment

FS_ID:52115 DS_ID:16400 EP_NO: N/A

slide gate.

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 LS inlet was underwater. WS flapgate blocked shut by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Sediment dug out from in front of flap gate. Gate can now function properly. (DWR Sutter Yard-AFreitag)4/27/2016 WS flapgate still blocked from opening by sediment buildup.7/01/2015 New screwgate installed on the LS. WS flapgate is still blocked from opening by sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 Sediment is built up against WS flap gate not allowing it to open. Handle for LS slide gate is still missing.4/19/2012 Handle missing on

FIELD_STRUCT_DESC: 1 of 2: 36-inch corrugated metal drainage pipe through the levee, 9.7 feet below the crown. Concrete "U" headwalls located on the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.54)]

FS Date: 6/7/2017 12:18:14 PM

LM Start	2.53	Rating **	A/W	Issue No.	915 (cont)
LM End	2.53	Issue Type +	Ma	Location *	

Photo 2 of 3: UCIP_FA_2018_52115_67068.jpg



View of WS slope.

Photo 3 of 3: UCIP_FA_2018_52115_67064.jpg



Headwall and flap gates (2) located on WS

* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

** Rating

A : Acceptable N : Not Inspected/Rated M: Minimally Acceptable CR : Corrected U: Unacceptable A/W : Acceptable but Monitor & Maintain

** Rating

A : Not Applicable M: Not Inspected/Rated M: Minimally Acceptable D: C: Corrected Ob: Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	2.53	Rating **	A/W	Issue No.		916
LM End	2.53	Issue Type +	Ма	Location *		
Category				GPS Latitude/Longitude		
Calegory	Category					End
Item	DWR UCI	39.53917	9°	39.539179°		
пеш				-121.70606	0°	-121.706060 °
DWR ID	17169					

Inspector Comment

Comment Code

FS_ID:52116 DS_ID:17169 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 LS inlet was underwater. WS appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition.7/01/2015 New screwgate installed on the LS. WS appears to be in good condition.5/29/2014 Same as last

inspection.12/9/2013 Same as last inspection.7/10/2013 Same as last inspection.

FIELD_STRUCT_DESC: 2 of 2: 36-inch corrugated metal drainage pipe through the levee, 9.7 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.54)]
FS Date: 6/7/2017 12:28:51 PM

 LM Start
 2.53
 Rating **
 A/W
 Issue No.
 916 (cont)

 LM End
 2.53
 Issue Type +
 Ma
 Location *

Photo 1 of 3: UCIP_FA_2018_52116_67075.jpg



Overview at levee crown looking south

Photo 2 of 3: UCIP_FA_2018_52116_67074.jpg



View of WS slope.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	2.53	Rating **	A/W	Issue No.		916 (cont)
LM End	2.53	Issue Type +	Ма	Location *		
Supplemental		Supplemental			itud	e/Longitude
Calegory	Category				Start	
Item	DWR UCI	DWR UCIP LMA Responsibility			9°	39.539179°
пеш			-121.70606	o°	-121.706060 °	
DWR ID	17169					·

Inspector Comment

Comment Code

FS_ID:52116 DS_ID:17169 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 LS inlet was underwater. WS appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition.7/01/2015 New screwgate installed on the LS. WS appears to be in good condition.5/29/2014 Same as last inspection 12/9/2013. Same as last inspection 7/10/2013. Same as

inspection.12/9/2013 Same as last inspection.7/10/2013 Same as last inspection.

FIELD_STRUCT_DESC: 2 of 2: 36-inch corrugated metal drainage pipe through the levee, 9.7 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 2.54)] FS Date: 6/7/2017 12:28:51 PM Photo 3 of 3: UCIP_FA_2018_52116_67071.jpg



Headwall and flap gates (2) located on the WS.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	2.62	Rating **	М	Issue No.		Issue No.		917
LM End	2.62	Issue Type +	Ма	Location *				
Category			GPS Latitude/Longitud					
Calegory	Calegory				Start			
Item	DWR UCI	P LMA Respo	onsibility	39.53786	4 °	39.537864°		
пеш				-121.70619	o°	-121.706190°		
DWR ID	16402							

Inspector Comment

Comment Code

FS ID:52117 DS_ID:16402 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Sediment blocking LS slide gate from closing fully. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Sediment still blocking screw gate from fully closing. (DWR Sutter Yard- AFreitag)4/27/2016 LS slide gate is full of sediment and needs to be dug out so gate can close fully.7/01/2015 LS screwgate is still silted in and unable to be screwed down all the way. Needs to be cleaned out.5/29/2014 Same as last inspection.12/9/2013 WS flapgate was closed but LS slidegate is heavily vegetated and blocked from closing by sediment.7/10/2013 Same as last inspection.4/19/2012 Minor sediment built up on LS. remove sediment. Need photo of LS slide gate without sediment build up. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13G_2011_p_0148 for LS gate obstructed by vegetation and WS flap gate is not functionning (propped

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. Structure used to drain water from Nelson Shippe Road. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.63)] FS Date: 6/7/2017 12:45:23 PM

Photo 1 of 3: UCIP_FA_2018_52117_67077.jpg

Overview looking south from left levee

Minimally Acceptable

U : Unacceptable

A/W : Acceptable but Monitor & Maintain

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	2.62	Rating **	М	Issue No.		917 (cont)	
LM End	2.62	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory		Start		End			
Itom	DWR UCI	P LMA Respo	nsibility	39.53786	4 °	39.537864°	
пеш	Item				o°	-121.706190°	
DWR ID	16402						
Comment Code							

Inspector Comment

FS_ID:52117 DS_ID:16402 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Sediment blocking LS slide gate from closing fully. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Sediment still blocking screw gate from fully closing. (DWR Sutter Yard-AFreitag)4/27/2016 LS slide gate is full of sediment and needs to be dug out so gate can close fully.7/01/2015 LS screwgate is still silted in and unable to be screwed down all the way. Needs to be cleaned out.5/29/2014 Same as last inspection.12/9/2013 WS flapgate was closed but LS slidegate is heavily vegetated and blocked from closing by sediment.7/10/2013 Same as last inspection.4/19/2012 Minor sediment built up on LS, remove sediment. Need photo of LS slide gate without sediment build up. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13G_2011_p_0148 for LS gate obstructed by vegetation and WS flap gate is not functionning (propped open).

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. Structure used to drain water from Nelson Shippe Road. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.63)] FS Date: 6/7/2017 12:45:23 PM



Headwall and flap gate located on WS.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	2.62	Rating **	М	Issue No.		917 (cont)	
LM End	2.62	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory		Start		End			
Itom	DWR UCI	P LMA Respo	nsibility	39.53786	4 °	39.537864°	
пеш	Item				o°	-121.706190°	
DWR ID	16402						
Comment Code							

Inspector Comment

FS_ID:52117 DS_ID:16402 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Sediment blocking LS slide gate from closing fully. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Sediment still blocking screw gate from fully closing. (DWR Sutter Yard-AFreitag)4/27/2016 LS slide gate is full of sediment and needs to be dug out so gate can close fully.7/01/2015 LS screwgate is still silted in and unable to be screwed down all the way. Needs to be cleaned out.5/29/2014 Same as last inspection.12/9/2013 WS flapgate was closed but LS slidegate is heavily vegetated and blocked from closing by sediment.7/10/2013 Same as last inspection.4/19/2012 Minor sediment built up on LS, remove sediment. Need photo of LS slide gate without sediment build up. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13G_2011_p_0148 for LS gate obstructed by vegetation and WS flap gate is not functionning (propped open).

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. Structure used to drain water from Nelson Shippe Road. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.63)] FS Date: 6/7/2017 12:45:23 PM



Headwall and screw gate located on LS.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	2.63	Rating **	М	Issue No.		918	
LM End	2.63	Issue Type +	Ма	Location *			
Category			GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UCI	IP LMA Respo	onsibility	39.53767	1 °	39.537671 °	
пеш				-121.70621	0 °	-121.706210 °	
DWR ID	16403						

Inspector Comment

Comment Code

FS_ID:52119 DS_ID:16403 EP_NO: N/A

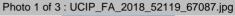
Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.7/01/2015 WS flap gate is partially blocked by sediment and needs to be cleaned.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition.4/19/2012 Burrowing holes located above WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.7 feet below the crown. Concrete "U" headwalls located on the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.65)]

FS Date: 6/7/2017 12:48:30 PM

LM Start	2.63	Rating **	М	Issue No.	918 (cont)
LM End	2.63	Issue Type +	Ma	Location *	





Overview at levee crown looking south

Photo 2 of 3: UCIP_FA_2018_52119_67084.jpg



Headwall and flap gate located on WS

* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

** Rating

A : Acceptable N : Not Inspected/Rated M: Minimally Acceptable CR : Corrected U: Unacceptable A/W : Acceptable but Monitor & Maintain

** Rating

A : Not Applicable M: Not Inspected/Rated M: Minimally Acceptable D: C: Corrected Ob: Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	2.63	Rating **	М	Issue No.		918 (cont)
LM End	2.63	Issue Type +	Ма	Location *		
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.53767	1°	39.537671°
пеш				-121.70621	o°	-121.706210 °
DWR ID	16403					

Comment Code Inspector Comment

FS_ID:52119 DS_ID:16403 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.7/01/2015 WS flap gate is partially blocked by sediment and needs to be cleaned.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.12/9/2013 Same as last inspection and are in good condition.4/19/2012 Burrowing holes located above WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.7 feet below the crown. Concrete "U" headwalls located on the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.65)]

FS Date: 6/7/2017 12:48:30 PM

Photo 3 of 3: UCIP_FA_2018_52119_67086.jpg



Headwall and screw gate located on the LS

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	2.65	Rating **	М	Issue No.		919
LM End	2.65	Issue Type +	Ма	Location *		
Category Supplemental			GPS Latitude/Longitude			
Calegory				Start		End
ltom	DWR UCI	P LMA Respo	nsibility	39.53746	66°	39.537466°
Item				-121.70624	10°	-121.706240°
DWR ID	16415					·

Inspector Comment

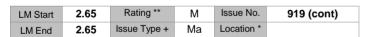
Comment Code

FS_ID:52120 DS_ID:16415 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both gates partially submerged during site visit. Appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 LS screw gate closed but partially buried. WS flapgate was half submerged for inspection. (DWR Sutter Yard- AFreitag)4/27/2016 Both gates were underwater for inspection.7/01/2015 WS flap gate is partially held open by sediment and needs to be dug out to allow it to fully close.5/29/2014 Same as last inspection.12/9/2013 Both gates were out of water and in good condition.7/10/2013 LS and WS slopes are in good condition. Both LS and WS gates were fully submerged in water and unable to be inspected.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9 feet below the crown. Concrete "U" headwall on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.66)] FS Date: 6/7/2017 12:50:33 PM





Overview looking south from left levee

Photo 2 of 3: UCIP_FA_2018_52120_67091.jpg



Headwall and flap gate located on WS.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	2.65	Rating **	М	Issue No.		919 (cont)
LM End	2.65	Issue Type +	Ма	Location *		
Category			Supplemental			e/Longitude
Calegory				Start		End
Itom	DWR UCI	P LMA Respo	nsibility	39.53746	6°	39.537466°
Item			-121.70624	o°	-121.706240°	
DWR ID	16415					

Inspector Comment

Comment Code

FS_ID:52120 DS_ID:16415 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both gates partially submerged during site visit. Appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 LS screw gate closed but partially buried. WS flapgate was half submerged for inspection. (DWR Sutter Yard- AFreitag)4/27/2016 Both gates were underwater for inspection.7/01/2015 WS flap gate is partially held open by sediment and needs to be dug out to allow it to fully close.5/29/2014 Same as last inspection.12/9/2013 Both gates were out of water and in good condition.7/10/2013 LS and WS slopes are in good condition. Both LS and WS gates were fully submerged in water and unable to be inspected.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9 feet below the crown. Concrete "U" headwall on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.66)] FS Date: 6/7/2017 12:50:33 PM

Photo 3 of 3: UCIP_FA_2018_52120_67092.jpg

WS headwall and flap gate.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.59	Rating **	М	Issue No.		920	
LM End	3.59	Issue Type +	Ma	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.5238	29°	39.523829°	
пеш				-121.7062	90°	-121.706290 °	
DWR ID	16405						
	Comment Code						

Inspector Comment

FS_ID:52121 DS_ID:16405 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Abandoned- LS slide gate completely buried in rice field and WS frlap gate almost fully buried. (DWR Sutter Yard- AFreitag)11/18/2016 appears abandoned. Both gates completely buried. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears abandoned. LS screw gate still buried and WS flap gate was 95% buried.7/01/2015 Still a non functioning crossing. LS screw gate is completely buried by sediment with only part of its frame and stem visible. WS flapgate is blocked from opening by sediment and debris.5/29/2014 Same as last inspection.12/9/2013 LS slide gate is completely buried by soil and WS flap gate is blocked from opening by sediment. Crossing appears abandoned and non-function.

7/10/2013 LS and WS slopes have been cleared by vegetation and are in good condition. WS flap gate is out of water but is blocked from opening by sediment build up. LS gate is fully submerged and not able to be inspected.4/19/2012 Non-functioning crossing. Farmer uses pipe located at LM 3.682 to drain field & not this one. Dense vegetationneed photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13G_2011_p_0172 for no access to WS gate due to high water & dense vegetation.

FIELD_STRUCT_DESC: *ABANDONED* 36-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.61)]
FS Date: 6/7/2017 12:58:12 PM

Photo 1 of 3: UCIP_FA_2018_52121_67094.jpg



Overview looking south from left levee

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.59	Rating **	М	Issue No.		920 (cont)
LM End	3.59	Issue Type +	Ma	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.52382	29°	39.523829°
item				-121.70629	90°	-121.706290 °
DWR ID	16405					
Comment Code						

Inspector Comment

FS ID:52121 DS_ID:16405 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Abandoned- LS slide gate completely buried in rice field and WS frlap gate almost fully buried. (DWR Sutter Yard- AFreitag)11/18/2016 appears abandoned. Both gates completely buried. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears abandoned. LS screw gate still buried and WS flap gate was 95% buried.7/01/2015 Still a non functioning crossing. LS screw gate is completely buried by sediment with only part of its frame and stem visible. WS flapgate is blocked from opening by sediment and debris.5/29/2014 Same as last inspection.12/9/2013 LS slide gate is completely buried by soil and WS flap gate is blocked from opening by sediment. Crossing appears abandoned and non-function.

7/10/2013 LS and WS slopes have been cleared by vegetation and are in good condition. WS flap gate is out of water but is blocked from opening by sediment build up. LS gate is fully submerged and not able to be inspected.4/19/2012 Non-functioning crossing. Farmer uses pipe located at LM 3.682 to drain field & not this one. Dense vegetationneed photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13G_2011_p_0172 for no access to WS gate due to high water & dense vegetation.

FIELD_STRUCT_DESC: *ABANDONED* 36-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.61)] FS Date: 6/7/2017 12:58:12 PM

Photo 2 of 3: UCIP_FA_2018_52121_67095.jpg



Flap gate submerged in water on WS of levee

+ Issue Type Ma: Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.59	Rating **	М	Issue No.		920 (cont)	
LM End	3.59	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.523829°		39.523829°	
пеш				-121.70629	0°	-121.706290 °	
DWR ID	16405						
	Comment Code						

Inspector Comment

FS_ID:52121 DS_ID:16405 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Abandoned- LS slide gate completely buried in rice field and WS frlap gate almost fully buried. (DWR Sutter Yard- AFreitag)11/18/2016 appears abandoned. Both gates completely buried. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears abandoned. LS screw gate still buried and WS flap gate was 95% buried.7/01/2015 Still a non functioning crossing. LS screw gate is completely buried by sediment with only part of its frame and stem visible. WS flapgate is blocked from opening by sediment and debris.5/29/2014 Same as last inspection.12/9/2013 LS slide gate is completely buried by soil and WS flap gate is blocked from opening by sediment. Crossing appears abandoned and non-function.

7/10/2013 LS and WS slopes have been cleared by vegetation and are in good condition. WS flap gate is out of water but is blocked from opening by sediment build up. LS gate is fully submerged and not able to be inspected.4/19/2012 Non-functioning crossing. Farmer uses pipe located at LM 3.682 to drain field & not this one. Dense vegetationneed photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13G_2011_p_0172 for no access to WS gate due to high water & dense vegetation.

FIELD_STRUCT_DESC: *ABANDONED* 36-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.61)]
FS Date: 6/7/2017 12:58:12 PM



View of flap gate submerged on WS toe.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.65	Rating **	A/W	Issue No.		921	
LM End	3.65	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
ltom	DWR UCI	P LMA Respo	nsibility	39.5235	56°	39.523556°	
item	Item				40°	-121.705340°	
DWR ID 16848							

Inspector Comment

Comment Code

FS_ID:52122 DS_ID:16848 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends submerged but appear to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition. New slide gate installed on LS.7/01/2015 Both gates were still submerged in water. Levee slopes were in good condition.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS slope has been cleared of vegetation and is in good condition. Both gates are still underwater and not able to be inspected.4/19/2012 Dense vegetation makes it difficult to evaluate the condition of the LS slope. Both gates underwater. Recommend taking photos of clear slopes and gates during fall inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.67)]

FS Date: 6/7/2017 1:21:24 PM

LM Start	3.65	Rating **	A/W	Issue No.	921 (cont)
LM End	3.65	Issue Type +	Ma	Location *	



Overview looking south on left levee

Photo 2 of 3: UCIP_FA_2018_52122_67103.jpg



Headwall and flap gate located on WS.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.65	Rating **	A/W	Issue No.	921 (cont)		
LM End	3.65	Issue Type +	Ма	Location *			
Category	Suppleme	ental	GPS Latitude/Longitude				
Calegory				Start End			
Item	DWR UCI	P LMA Respo	nsibility	39.52355	6 °	39.523556°	
пеш				-121.70534	-121.705340°		
DWR ID	16848						
Comment Code							

Inspector Comment

FS_ID:52122 DS_ID:16848 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends submerged but appear to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition. New slide gate installed on LS.7/01/2015 Both gates were still submerged in water. Levee slopes were in good condition.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS slope has been cleared of vegetation and is in good condition. Both gates are still underwater and not able to be inspected.4/19/2012 Dense vegetation makes it difficult to evaluate the condition of the LS slope. Both gates underwater. Recommend taking photos of clear slopes and gates during fall inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.67)]

FS Date: 6/7/2017 1:21:24 PM

Photo 3 of 3: UCIP_FA_2018_52122_67101.jpg



Headwall and screw gate located on LS.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.83	Rating **	М	Issue No.	922			
LM End	3.83	Issue Type +	Ма	Location *				
Supplemental				GPS Latitude/Longitude				
Category				Start End				
Item	DWR UCI	P LMA Respo	nsibility	39.524350°		39.524350°		
item			-121.7021	80°	-121.702180°			
DWR ID	16847							
Comment Code								

Inspector Comment

FS_ID:52123 DS_ID:16847 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends submerged but crossing

appears to be in good condition. (DWR Sutter Yard-

AFreitag)11/18/2016 Crossing appears to be in good condition. It appears that this crossing does not require a slide gate. (DWR Sutter Yard- AFreitag)4/27/2016 LS slide gate was still missing. Rest of crossing appears to be in good condition.7/01/2015 There appears to be a LS gate now but both pipe ends were submerged so it was hard to tell for certain.5/29/2014 Same as last inspection.12/9/2013 Pulled sticks from WS flap gate to allow it to close. Ls gate is still missing.7/10/2013 WS and LS slopes have been cleared of vegetation and are in good condition. LS gate is still missing and WS flap gate is still wedged open with sticks.4/19/2012 LS gate missing & limited inspection. Need photos of WS & LS cleared slopes. Description calls for slide gate on LS-slide gate missing. Debris scattered near LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE_CESPK_M13J_2011_p_0010 for WS gate wedged open & missing LS slide gate.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.85)]

FS Date: 6/7/2017 1:24:40 PM



Overview looking south on left levee

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.83	Rating **	М	Issue No.		922 (cont)	
LM End	3.83	Issue Type +	Ma	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.52435	50°	39.524350°	
item	tem				30°	-121.702180°	
DWR ID 16847							

Inspector Comment

Comment Code

FS_ID:52123 DS_ID:16847 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends submerged but crossing

appears to be in good condition. (DWR Sutter Yard-

AFreitag)11/18/2016 Crossing appears to be in good condition. It appears that this crossing does not require a slide gate. (DWR Sutter Yard- AFreitag)4/27/2016 LS slide gate was still missing. Rest of crossing appears to be in good condition.7/01/2015 There appears to be a LS gate now but both pipe ends were submerged so it was hard to tell for certain.5/29/2014 Same as last inspection.12/9/2013 Pulled sticks from WS flap gate to allow it to close. Ls gate is still missing.7/10/2013 WS and LS slopes have been cleared of vegetation and are in good condition. LS gate is still missing and WS flap gate is still wedged open with sticks.4/19/2012 LS gate missing & limited inspection. Need photos of WS & LS cleared slopes. Description calls for slide gate on LS-slide gate missing. Debris scattered near LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE_CESPK_M13J_2011_p_0010 for WS gate wedged open & missing LS slide gate.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.85)]

FS Date: 6/7/2017 1:24:40 PM



Headwall and flap gate located on WS toe.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.83	Rating **	М	Issue No.	922 (cont)		
LM End	3.83	Issue Type +	Ма	Location *			
Category	Suppleme	ental	GPS Latitude/Longitude				
Calegory				Start End			
Item	DWR UCI	P LMA Respo	nsibility	39.52435	50°	39.524350°	
пеш				-121.70218	30°	-121.702180 °	
DWR ID	16847						
Comment Code							

Inspector Comment

FS ID:52123 DS_ID:16847 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends submerged but crossing

appears to be in good condition. (DWR Sutter Yard-

AFreitag)11/18/2016 Crossing appears to be in good condition. It appears that this crossing does not require a slide gate. (DWR Sutter Yard- AFreitag)4/27/2016 LS slide gate was still missing. Rest of crossing appears to be in good condition.7/01/2015 There appears to be a LS gate now but both pipe ends were submerged so it was hard to tell for certain.5/29/2014 Same as last inspection.12/9/2013 Pulled sticks from WS flap gate to allow it to close. Ls gate is still missing.7/10/2013 WS and LS slopes have been cleared of vegetation and are in good condition. LS gate is still missing and WS flap gate is still wedged open with sticks.4/19/2012 LS gate missing & limited inspection. Need photos of WS & LS cleared slopes. Description calls for slide gate on LS-slide gate missing. Debris scattered near LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE_CESPK_M13J_2011_p_0010 for WS gate wedged open & missing LS slide gate. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe

through the levee, 8.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log. 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.85)]

FS Date: 6/7/2017 1:24:40 PM

Photo 3 of 3: UCIP_FA_2018_52123_67110.jpg



View of channel at crossing looking D/S.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.84	Rating **	С	Issue No.		66	
LM End	3.84	Issue Type +	Ма	Location *		LS	
Category Earthen Levee			GPS Latitude/Longitude				
Category				Start		End	
Item	Crown Surface / Depressions /			39.5244	67°	39.524467°	
пеш	Rutting			-121.7018	78°	-121.701878°	
DWR ID	DWR_MA0	013_02_s _ 201	18_66				
Comment Code							
C1 : Add appropriate material and re-grade the levee to bring the crown							

above the design elevation.

Inspector Comment

The crown roadway was re-graveled this summer.

LM Start	4.17	Rating **	М	Issue No.	923		
LM End	4.17	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	onsibility	39.5282	10°	39.528210	0
пеш				-121.6984	10°	-121.698410	0
DWR ID	16846						

Inspector Comment

Comment Code

FS_ID:52124 DS_ID:16846 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends submerged during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Both pipe ends underwater for this inspection. (DWR Sutter Yard-AFreitag)4/27/2016 Both pipe ends were underwater for inspection.7/01/2015 Both pipe ends and gates were fully submerged.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope is cleared of vegetation and is in good condition. Both gates were fully submerged under water and unable to be inspected.4/19/2012 Rodent activity caused partial collapse on LS of levee in the vicinity of pipe. Limited inspection on WS slope due to dense vegetation. Limited inspection on gates due to both gates submerged under water.

FIELD STRUCT DESC: 36-inch corrugated metal drainage pipe through the levee, 9.3 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. Concrete sump area with flash boards to drain farmers field is located on farmer's property near drain inlet. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.20)]

FS Date: 6/7/2017 1:27:00 PM



No Photos

Overview looking east on right bank of Cottonwood

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	4.17	Rating **	М	Issue No.		923 (cont)
LM End	4.17	Issue Type + Ma		Location *		
Category	Suppleme	ental		GPS Lat	ituc	de/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.52821	0 °	39.528210°
item				-121.69841	o°	-121.698410°
DWR ID	16846					

Inspector Comment

Comment Code

FS_ID:52124 DS_ID:16846 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends submerged during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Both pipe ends underwater for this inspection. (DWR Sutter Yard- AFreitag)4/27/2016 Both pipe ends were underwater for inspection.7/01/2015 Both pipe ends and gates were fully submerged.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope is cleared of vegetation and is in good condition. Both gates were fully submerged under water and unable to be inspected.4/19/2012 Rodent activity caused partial collapse on LS of levee in the vicinity of pipe. Limited inspection on WS slope due to dense vegetation. Limited inspection on gates due to both gates submerged under water.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.3 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. Concrete sump area with flash boards to drain farmers field is located on farmer's property near drain inlet. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.20)]

FS Date: 6/7/2017 1:27:00 PM

LM Start	4.17	Rating **	М	Issue No.	923 (cont)
LM End	4.17	Issue Type +	Ma	Location *	

Photo 2 of 3 : UCIP_FA_2018_52124_67116.jpg

Unable to determine condition of flap gate on WS due to high water.

Photo 3 of 3: UCIP_FA_2018_52124_67113.jpg



Overview of LS screw gate and concrete sump structure.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy

M: Minimally Acceptable C: C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating

A: Acceptable M: N: Not Inspected/Rated M: Maintenance Deficiancy Ob: Design & System Obsolescence

En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	4.65	Rating **	A/W	Issue No.	924		
LM End	4.65	Issue Type +	Ma	Location *			
Category	Suppleme		GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UCIP LMA Responsibility			39.5325	10°	39.532510°	
пеш				-121.6913	40°	-121.691340°	
DWR ID	16845						
Comment Code							

Inspector Comment

FS_ID:52125 DS_ID:16845 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 LS Slide gate mostly underwater due to rice field being flooded but crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag) 11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag) 4/27/2016 Crossing appears to be in good condition.7/01/2015 Crossing appears to be in good condition. No noticeable issues to report.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope has been cleared of vegetation and is in good condition.4/19/2012

of clear WS slope.
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 5.6 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.69)]

Limited inspection due to dense vegetation on WS slope. Need photos

FS Date: 6/7/2017 1:41:34 PM

LM Start	4.65	Rating **	A/W	Issue No.	924 (cont)
LM End	4.65	Issue Type +	Ma	Location *	



Overview looking east on right levee of Gold Run Creek (referred to Unit 2 of Cherokee Canal).

Photo 2 of 3: UCIP_FA_2018_52125_67122.jpg



Headwall and flap gate located on WS.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	4.65	Rating **	A/W	Issue No.	924 (cont)		
LM End	4.65	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS La	titud	e/Longitude	
Calegory				Start		End	
Item	DWR UCI	IP LMA Respo	nsibility	39.5325	10°	39.532510	0
пеш				-121.6913	40 °	-121.691340	0
DWR ID	16845						

Inspector Comment

Comment Code

FS_ID:52125 DS_ID:16845 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 LS Slide gate mostly underwater due to rice field being flooded but crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition.7/01/2015 Crossing appears to be in good condition. No noticeable issues to report.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope has been cleared of vegetation and is in good condition.4/19/2012

of clear WS slope.
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 5.6 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE

Limited inspection due to dense vegetation on WS slope. Need photos

Sacramento O&M Manual 519, June 1962 (HLM 4.69)] FS Date: 6/7/2017 1:41:34 PM Photo 3 of 3 : UCIP_FA_2018_52125_67123.jpg



View of channel at crossing.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.01	Rating **	A/W	Issue No.		925	
LM End	5.01	Issue Type +	Ма	Location *			
Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	onsibility	39.52629	98°	39.526298°	
item				-121.68832	20°	-121.688320°	
DWR ID 16395							

Inspector Comment

Comment Code

FS_ID:52126 DS_ID:16395 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 WS mostly submerged but crossing

appears to be in good condition.(DWR Sutter Yard-

AFreitag)11/18/2016 Crossing appears to be in good condition. Pipe is a 30" cmp. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Erosion on LS does not appear to be getting any worse with the rip-rap there. WS pipe end and gate appeared in good condition.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection.4/19/2012 Rusted pipe debris located on WS. Remove pipe debris on WS and monitor the LS erosion near headwall. Rip-rap used to protect LS headwall from erosion. Was pipe exposed prior to dumping rock? Erosion on the LS could have exposed pipe. Dense shrub on the LS could restrict flow.

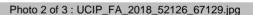
FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.06)]

FS Date: 6/7/2017 1:54:08 PM

LM Start	5.01	Rating **	A/W	Issue No.	925 (cont)
LM End	5.01	Issue Type +	Ma	Location *	



Overview looking west on the left levee of Cottonwood





Headwall and flap gate located on WS.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.01	Rating **	A/W	Issue No.		925 (cont)		
LM End	5.01	Issue Type +	Ма	Location *				
Category	ental	GPS La	tituc	le/Longitude				
Calegory				Start End				
Item	DWR UCI	P LMA Respo	nsibility	39.52629	98°	39.526298°		
пеш				-121.68832	20°	-121.688320°		
DWR ID 16395								
Comment Code								

Inspector Comment

FS_ID:52126 DS_ID:16395 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 WS mostly submerged but crossing

appears to be in good condition.(DWR Sutter Yard-

AFreitag)11/18/2016 Crossing appears to be in good condition. Pipe is a 30" cmp. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Erosion on LS does not appear to be getting any worse with the rip-rap there. WS pipe end and gate appeared in good condition.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection.4/19/2012 Rusted pipe debris located on WS. Remove pipe debris on WS and monitor the LS erosion near headwall. Rip-rap used to protect LS headwall from erosion. Was pipe exposed prior to dumping rock? Erosion on the LS could have exposed pipe. Dense shrub on the LS could restrict flow.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 5.06)] FS Date: 6/7/2017 1:54:08 PM

Photo 3 of 3: UCIP_FA_2018_52126_67126.jpg



View of channel at crossing.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.09	Rating **	A/W	Issue No.		Issue No.		926
LM End	5.09	Issue Type +	Ма	Location *				
Category	Supplemental				titud	e/Longitude		
Calegory				Start		End		
Item	DWR UCI	P LMA Respo	nsibility	39.5269 ⁻	17°	39.526917°		
пеш				-121.6893	40 °	-121.689340°		
DWR ID	16408							

Inspector Comment

Comment Code

FS_ID:52129 DS_ID:16408 EP_NO: N/A

gate on LS.

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing appears to be in good condition. No apparent issues to report.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 WS and LS slopes have been cleared of vegetation and are in good condition. Slide gate on LS has been replaced.4/24/2012 Slide gate is damaged, needs to be replaced. Limited inspection on WS slope and toe due to dense vegetation. Need photos of clear WS slope and toe.

This crossing was listed in the USACE Periodic Inspection report as Corp's inspection ID# USACE_CESPK_M13H_2011_p_0026 for broken

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 5.7 feet below the crown. Flap gate on the waterside (WS). Slide gate on the landside (LS). Concrete "U" headwalls located on both WS and LS ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.13)] FS Date: 6/7/2017 2:01:22 PM

LM Start	5.09	Rating **	A/W	Issue No.	926 (cont)
LM End	5.09	Issue Type +	Ma	Location *	



Overview of levee crown at crossing looking west.





Headwall and flap gate located on WS.

* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

** Rating

A : Acceptable N : Not Inspected/Rated M: Minimally Acceptable CR : Corrected U: Unacceptable A/W : Acceptable but Monitor & Maintain

** Rating

A : Not Applicable M: Not Inspected/Rated M: Minimally Acceptable D: C: Corrected Ob: Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.09	Rating **	A/W	Issue No.		926 (cont)		
LM End	5.09	Issue Type +	Ма	Location *				
Category	ental	GPS Latitude/Longitude						
Calegory	Category					End		
Item	DWR UCI	P LMA Respo	nsibility	39.52691	7°	39.526917°		
пеш				-121.68934	o Ol	-121.689340°		
DWR ID 16408								
Comment Code								

Inspector Comment

FS ID:52129 DS_ID:16408 EP NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing appears to be in good condition. No apparent issues to report.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 WS and LS slopes have been cleared of vegetation and are in good condition. Slide gate on LS has been replaced.4/24/2012 Slide gate is damaged, needs to be replaced. Limited inspection on WS slope and toe due to dense vegetation. Need photos of clear WS slope and toe. This crossing was listed in the USACE Periodic Inspection report as Corp's inspection ID# USACE_CESPK_M13H_2011_p_0026 for broken gate on LS.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 5.7 feet below the crown. Flap gate on the waterside (WS). Slide gate on the landside (LS). Concrete "U" headwalls located on both WS and LS ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.13)] FS Date: 6/7/2017 2:01:22 PM

Photo 3 of 3: UCIP_FA_2018_52129_67141.jpg



Overview of LS floor is higher in elevation than pipe invert causing build up sediment.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.29	Rating **	М	Issue No.		927
LM End	5.29	Issue Type +	Ma	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.5259	58°	39.525958°
пеш				-121.6927	30°	-121.692730 °
DWR ID	16409					

Inspector Comment

Comment Code

FS_ID:52130 DS_ID:16409 EP_NO: N/A

LM End

5.29

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 WS fully submerged and LS slide gate mostly buried by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 There is a flapgate on the WS and a slide gate on the LS. The LS slide gate appears to be partially buried and blocked by vegetation. (DWR Sutter Yard-AFreitag)4/27/2016 LS slide gate is blocked by vegetation. Pipe appears to not be used.6/30/2015 WS flap gate was still overgrown with vegetation. Needs to be cleared away.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection. Need photo of clear WS slope during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13H_2011_p_0035 non-functional crossing due to overgrown vegetation on WS flap gate.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 5.8 feet below the crown. Flap gate on the waterside (WS). Slide gate on the landside (LS). Concrete "U" headwalls located on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.34)] FS Date: 6/7/2017 2:02:27 PM

LM Start 5.29 Rating ** M Issue No. 927 (cont)

Ma

Location '

Issue Type +



Overview of crossing looking downstream.

Photo 2 of 3: UCIP_FA_2018_52130_67149.jpg



View of WS headwall with dense vegetation in channel.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.29	Rating **	М	Issue No.		927 (cont)
LM End	5.29	Issue Type +	Ма	Location *		
Category			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UCIP LMA Responsibility			39.52595	3°	39.525958°
пеш				-121.69273	°	-121.692730 °
DWR ID	16409					·

Inspector Comment

Comment Code

FS_ID:52130 DS_ID:16409 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 WS fully submerged and LS slide gate mostly buried by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 There is a flapgate on the WS and a slide gate on the LS. The LS slide gate appears to be partially buried and blocked by vegetation. (DWR Sutter Yard-AFreitag)4/27/2016 LS slide gate is blocked by vegetation. Pipe appears to not be used.6/30/2015 WS flap gate was still overgrown with vegetation. Needs to be cleared away.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection. Need photo of clear WS slope during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13H_2011_p_0035 non-functional crossing due to overgrown vegetation on WS flap gate.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 5.8 feet below the crown. Flap gate on the waterside (WS). Slide gate on the landside (LS). Concrete "U" headwalls located on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.34)]

FS Date: 6/7/2017 2:02:27 PM

Photo 3 of 3: UCIP_FA_2018_52130_67148.jpg



Headwall and flap gate located on WS.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	9.56	Rating **	A/W	Issue No.		933	
LM End	9.56	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory	эгу			Start		End	
Item	DWR UCIP LMA Responsibility			39.477438°		39.477438°	
item				-121.7352	00°	-121.735200°	
DWR ID	16838						
Comment Code							

Inspector Comment

FS_ID:52145 DS_ID:16838 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Path to access the WS flap gate was getting overgrown with vegetation but other than that everything with the crossing looked in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.4/24/2012 This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0080 for limited visibility of LS slide gate and WS flap gate.7/9/2013 Same as last inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.2 feet below the crown. Crossing drains into Cherokee Canal and is part of the Richvale Irrigation District siphon structure. Slide gate is located on the landside (LS). Flap gate is located on the waterside (WS). Crossing angles to the southwest to a flap gate and headwall located about 60 feet from WS toe. [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 9.66)]

FS Date: 6/8/2017 8:19:25 AM

LM Start	9.56	Rating **	A/W	Issue No.	933 (cont)
LM End	9.56	Issue Type +	Ma	Location *	



Overview of levee crown at crossing looking D/S.



View of crossing looking from channel towards WS levee.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	9.56	Rating **	A/W	Issue No.	933 (cont)	
LM End	9.56	Issue Type +	Ма	Location *		
Category	Suppleme	GPS Latitude/Longitude				
Calegory			Start		End	
Item	DWR UCI	DWR UCIP LMA Responsibility			88°	39.477438°
пеш				-121.73520	00°	-121.735200°
DWR ID	16838					
Comment Code						

Inspector Comment

FS_ID:52145 DS_ID:16838 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Path to access the WS flap gate was getting overgrown with vegetation but other than that everything with the crosing looked in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.4/24/2012 This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0080 for limited visibility of LS slide gate and WS flap gate.7/9/2013 Same as last inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.2 feet below the crown. Crossing drains into Cherokee Canal and is part of the Richvale Irrigation District siphon structure. Slide gate is located on the landside (LS). Flap gate is located on the waterside (WS). Crossing angles to the southwest to a flap gate and headwall located about 60 feet from WS toe. [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 9.66)]

FS Date: 6/8/2017 8:19:25 AM



WS view-access well located 60 feet from WS toe.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	9.57	Rating **	A/W	Issue No.		934	
LM End	9.57	Issue Type +	Ma	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory		Start		End			
Item	DWR UCIP LMA Responsibility			39.47733	5°	39.477335 °	
item		-121.735340°		-121.735340 °			
DWR ID	16839						

Inspector Comment

Comment Code

FS_ID:52146 DS_ID:16839 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 WS flapgate is silted over and unable to open. Needs to be dug out.5/28/2014 Same as last inspection.12/4/2013 Slopes were cleared of vegetation and are in good condition.7/09/2013 Same as last inspection.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of WS and LS slopes during next inspection with clearned slopes.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Flap gate on the waterside (WS). [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 9.68)]
FS Date: 6/8/2017 8:20:37 AM

LM Start	9.57	Rating **	A/W	Issue No.	934 (cont)
LM End	9.57	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2018_52146_67289.jpg



WS view of crossing. Dense vegetation along WS slope limited visual inspection. (WS Photo 1 of 2)

Photo 2 of 3: UCIP_FA_2018_52146_67287.jpg



WS view of crossing. Dense vegetation along WS slope limited visual inspection. (WS Photo 2 of 2)

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	9.57	Rating **	A/W	Issue No.		934 (cont)		
LM End	9.57	Issue Type +	Ма	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory				Start		End		
Item	DWR UCI	P LMA Respo	nsibility	39.4773	35 °	39.477335°		
пеш				-121.7353	40 °	-121.735340°		
DWR ID	16839					·		
Comment Code								

Inspector Comment

FS_ID:52146 DS_ID:16839 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 WS flapgate is silted over and unable to open. Needs to be dug out.5/28/2014 Same as last inspection.12/4/2013 Slopes were cleared of vegetation and are in good condition.7/09/2013 Same as last inspection.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of WS and LS slopes during next inspection with clearned slopes.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Flap gate on the waterside (WS). [Additional Reference(s): USACE Sacramento O&M

Manual 519, June 1962 (HLM 9.68)] FS Date: 6/8/2017 8:20:37 AM

Photo 3 of 3: UCIP_FA_2018_52146_67286.jpg



View of crossing from LS. Dense vegetation along LS slope limited visual inspection. (LS Photo 1 of 2)

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	12.88	Rating **	М	Issue No.		940
LM End	12.88	Issue Type +	Ма	Location *		
Category	Suppleme	ental	GPS La	le/Longitude		
Calegory				Start	End	
Item	DWR UCI	P LMA Respo	nsibility	39.4347	79°	39.434779°
item						-121.763940 °
DWR ID	16385					
Comment Code						

Inspector Comment

FS ID:52154 DS_ID:16385 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 WS end cannot be located due to heavy vegetation. LS screwgate was mostly submerged during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 WS still heavily vegetated and cannot access the WS pipe end for inspection. Vegetation needs to be cleared back. (DWR Sutter Yard-AFreitag)4/26/2016 LS headwall was visible but gate was underwater. WS still heavily vegetated and unable to be inspected. Vegetation needs to be cleared back.6/30/2015 WS heavily vegetated passed the toe-road and could not make it to the WS pipe end for inspection. Vegetation needs to be cleared back. LS pipe end was fully submerged under water.5/28/2014 Same as last inspection, 12/4/2013 Same as last inspection, 7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall is now visible but mostly underwater so unable to do full inspection. WS is still vegetated.4/24/2012 LS pipe & slide gate sedimented in. Limited inspection WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0147 for limited visibility of

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Slide gate in ditch on the landside (LS). Pipe under channel is a 24-inch siphon. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.03)] FS Date: 6/8/2017 8:57:36 AM



Overview of crossing looking downstream at the left bank of Cherokee Canal.

U : Unacceptable

N: Not Inspected/Rated A/W : Acceptable but Monitor & Maintain + Issue Type Ma: Maintenance Deficiancy

Ob : Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	12.88	Rating **	М	Issue No.		940 (cont)	
LM End	12.88	Issue Type +	Ма	Location *			
Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	P LMA Respo	nsibility	39.4347	79°	39.434779°	
пеш				-121.7639	40°	-121.763940°	
DWR ID	16385						
	Comment Code						

Inspector Comment

FS ID:52154 DS_ID:16385 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 WS end cannot be located due to heavy vegetation. LS screwgate was mostly submerged during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 WS still heavily vegetated and cannot access the WS pipe end for inspection. Vegetation needs to be cleared back. (DWR Sutter Yard-AFreitag)4/26/2016 LS headwall was visible but gate was underwater. WS still heavily vegetated and unable to be inspected. Vegetation needs to be cleared back.6/30/2015 WS heavily vegetated passed the toe-road and could not make it to the WS pipe end for inspection. Vegetation needs to be cleared back. LS pipe end was fully submerged under water.5/28/2014 Same as last inspection, 12/4/2013 Same as last inspection, 7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall is now visible but mostly underwater so unable to do full inspection. WS is still vegetated.4/24/2012 LS pipe & slide gate sedimented in. Limited inspection WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0147 for limited visibility of

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Slide gate in ditch on the landside (LS). Pipe under channel is a 24-inch siphon. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.03)] FS Date: 6/8/2017 8:57:36 AM

Photo 2 of 3: UCIP_FA_2018_52154_67337.jpg



Stand pipe with screw gate WS

N: Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma: Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	12.88	Rating **	М	Issue No.	940 (cont)			
LM End	12.88	Issue Type +	Ма	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory	gory			Start		End		
Item	DWR UCI	IP LMA Respo	nsibility	39.43477	9°	39.434779°		
пеш			-121.763940 °		o°	-121.763940°		
DWR ID	16385							
	Comment Code							

Inspector Comment

FS ID:52154 DS_ID:16385 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 WS end cannot be located due to heavy vegetation. LS screwgate was mostly submerged during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 WS still heavily vegetated and cannot access the WS pipe end for inspection. Vegetation needs to be cleared back. (DWR Sutter Yard-AFreitag)4/26/2016 LS headwall was visible but gate was underwater. WS still heavily vegetated and unable to be inspected. Vegetation needs to be cleared back.6/30/2015 WS heavily vegetated passed the toe-road and could not make it to the WS pipe end for inspection. Vegetation needs to be cleared back. LS pipe end was fully submerged under water.5/28/2014 Same as last inspection, 12/4/2013 Same as last inspection, 7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall is now visible but mostly underwater so unable to do full inspection. WS is still vegetated.4/24/2012 LS pipe & slide gate sedimented in. Limited inspection WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0147 for limited visibility of

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Slide gate in ditch on the landside (LS). Pipe under channel is a 24-inch siphon. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.03)] FS Date: 6/8/2017 8:57:36 AM

Photo 3 of 3: UCIP_FA_2018_52154_67335.jpg



View of the inside of the WS stand pipe. No obstructions blocking slide gate.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	15.44	Rating **	М	Issue No.		941	
LM End	15.44	Issue Type +	Ma	Location *			
Category			GPS Latitude/Longitud				
Calegory				Start	End		
Item	DWR UC	P LMA Respo	nsibility	39.4192	09°	39.419209°	
item				-121.7736	-121.773680°		
DWR ID	16376						
	Comment Code						

Inspector Comment

FS_ID:52156 DS_ID:16376 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 LS pipe end is buried and location unknown. WS flap gate is bolted shut. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Unable to locate LS pipe end. WS flap gate bolted shut. (DWR Sutter Yard- AFreitag)4/26/2016 LS inlet appears to be buried as could not locate it. Ws flap gate was bolted shut. This appears to be an abandoned crossing.6/30/2015 Still unable to locate the LS pipe end. 5/28/2014 Same as last inspection.12/4/2013 Same as last inspection. WS flapgate was bolted shut to keep LS ricefield flooded.7/08/2013 WS slope has been cleared of vegetation and is in good condition. LS slope also cleared of vegetation but still very dense on LS toe and unbale to locate LS headwall.4/24/2012 Could not find LS end of pipe. Limited inspection on WS and LS slopes and toe due to dense vegetation. Need photos of cleared WS and LS slopes, and LS headwall during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0011 for WS gate blocked by

USACE_CESPK_M13E_2011_p_0011 for WS gate blocked by vegetation.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.1 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 15.62)] FS Date: 6/8/2017 9:22:20 AM



Overview of crossing looking downstream at the left bank of Cherokee Canal.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	15.44	Rating **	М	Issue No.	941 (cont)			
LM End	15.44	Issue Type +	Ма	Location *				
Category	Suppleme	ental		GPS Latitude/Longitude				
Calegory	egory			Start		End		
Item	DWR UCI	P LMA Respo	nsibility	39.41920	9°	39.419209°		
пеш				-121.77368	o°	-121.773680°		
DWR ID	16376							
	Comment Code							

Inspector Comment

FS_ID:52156 DS_ID:16376 EP_NO: N/A

vegetation.

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 LS pipe end is buried and location unknown. WS flap gate is bolted shut. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Unable to locate LS pipe end. WS flap gate bolted shut. (DWR Sutter Yard- AFreitag)4/26/2016 LS inlet appears to be buried as could not locate it. Ws flap gate was bolted shut. This appears to be an abandoned crossing.6/30/2015 Still unable to locate the LS pipe end. 5/28/2014 Same as last inspection.12/4/2013 Same as last inspection. WS flapgate was bolted shut to keep LS ricefield flooded.7/08/2013 WS slope has been cleared of vegetation and is in good condition. LS slope also cleared of vegetation but still very dense on LS toe and unbale to locate LS headwall.4/24/2012 Could not find LS end of pipe. Limited inspection on WS and LS slopes and toe due to dense vegetation. Need photos of cleared WS and LS slopes, and LS headwall during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0011 for WS gate blocked by

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.1 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 15.62)] FS Date: 6/8/2017 9:22:20 AM



Dense vegetation covering the majority of the WS. WS headwall difficult to see through dense vegetation.

A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence
En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	15.44	Rating **	М	Issue No.		941 (cont)
LM End	15.44	Issue Type +	Ma	Location *		
Category	Supplemental GPS Latitude/			de/Longitude		
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.41920	9°	39.419209°
пеш	item		-121.77368	o°	-121.773680°	
DWR ID	16376					

Inspector Comment

Comment Code

FS_ID:52156 DS_ID:16376 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 LS pipe end is buried and location unknown. WS flap gate is bolted shut. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Unable to locate LS pipe end. WS flap gate bolted shut. (DWR Sutter Yard- AFreitag)4/26/2016 LS inlet appears to be buried as could not locate it. Ws flap gate was bolted shut. This appears to be an abandoned crossing.6/30/2015 Still unable to locate the LS pipe end. 5/28/2014 Same as last inspection.12/4/2013 Same as last inspection. WS flapgate was bolted shut to keep LS ricefield flooded.7/08/2013 WS slope has been cleared of vegetation and is in good condition. LS slope also cleared of vegetation but still very dense on LS toe and unbale to locate LS headwall.4/24/2012 Could not find LS end of pipe. Limited inspection on WS and LS slopes and toe due to dense vegetation. Need photos of cleared WS and LS slopes, and LS headwall during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0011 for WS gate blocked by

vegetation.
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.1 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 15.62)] FS Date: 6/8/2017 9:22:20 AM



View of WS headwall and flap gate.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	15.68	Rating **	М	Issue No.	942		
LM End	15.68	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory						End	
Item	DWR UCI	P LMA Respo	nsibility	39.4170	43 °	39.417043°	
item				-121.7772	40 °	-121.777240°	
DWR ID	16382						
Comment Code							

Inspector Comment

FS_ID:52157 DS_ID:16382 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 LS pipe end is buried and location unknown. WS flap gate bolted shut. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Unable to locate LS pipe end. WS flap gate bolted shut. (DWR Sutter Yard- AFreitag)4/26/2016 Appears to be an abandoned crossing. LS pipe end was still buried and WS flap gate was bolted shut.6/30/2015 LS headwall stil buried somewhere. WS looked to be in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection.4/24/2012 LS headwall buried. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. Need to determine the fate of LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0022 -- unknown issue.

FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through the levee, 9 feet below the crown. Flap gate located on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). WS gate bolted shut and LS crossing is non-operable (inlet not found). Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.87)] FS Date: 6/8/2017 9:26:40 AM

LM Start	15.68	Rating **	М	Issue No.	942 (cont)
LM End	15.68	Issue Type +	Ma	Location *	



Overview of crossing looking downstream of the left bank of Cherokee



View of WS slope. Limited inspection due to the dense vegetation.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	15.68	Rating **	М	Issue No.	942 (cont)			
LM End	15.68	Issue Type +	Ма	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory				Start		End		
Item	DWR UC	P LMA Respo	nsibility	39.4170	43 °	39.417043°		
пеш				-121.7772	40°	-121.777240°		
DWR ID	16382							
	Comment Code							

Inspector Comment

FS_ID:52157 DS_ID:16382 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 LS pipe end is buried and location unknown. WS flap gate bolted shut. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Unable to locate LS pipe end. WS flap gate bolted shut. (DWR Sutter Yard- AFreitag)4/26/2016 Appears to be an abandoned crossing. LS pipe end was still buried and WS flap gate was bolted shut.6/30/2015 LS headwall stil buried somewhere. WS looked to be in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection.4/24/2012 LS headwall buried. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. Need to determine the fate of LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0022 -- unknown issue.

FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through the levee, 9 feet below the crown. Flap gate located on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). WS gate bolted shut and LS crossing is non-operable (inlet not found). Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.87)] FS Date: 6/8/2017 9:26:40 AM

Photo 3 of 3 : UCIP_FA_2018_52157_67350.jpg



View of WS headwall.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	15.98	Rating **	С	Issue No.	64				
LM End	15.98	Issue Type +	Ma	Location *	LS				
Category Earthen Levee			GPS Latitude/Longitude						
Category				Start		End			
Item	Animal Co	ontrol		39.41439	7°	39.414397°			
пеш				-121.781596°		-121.781596 °			
DWR ID	DWR ID DWR_MA0013_02_f _ 2016_64								
	Comment Code								
A3 : No ro	A3 : No rodents visible, but rodent burrows visible; need to backfill and								

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

The rodent holes were repaired along the landside slope.

Photo 1 of 1 : FA_2018_MA0013_301_54_20180905_00012.jpg

No Photos



View of the rodent holes along the waterside slope.

LM Start	16.52	Rating **	М	Issue No.		54	
LM End	16.52	Issue Type +	Ma	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
Category						End	
Item	Animal Co	ontrol		39.4095	48 °	39.409548°	
пеш				-121.7896	68°	-121.789668 °	
DWR ID	ID DWR_MA0013_02_f _ 2014_54						
Comment Code							

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

LM Start	17.41	Rating **	N	Issue No.		67	
LM End	17.41	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Trim / Thi	n Trees		39.4013	31°	39.401331	0
item				-121.8024	80°	-121.802480	0
DWR ID	DWR_MA0	013_02_f _ 201	6_67				
		Comn	nent Coo	le			

T5: Tree stumps.

Inspector Comment

Approximately eight stumps on the landside toe.

No Photos

Page 52 of 66

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated Ma: Maintenance Deficiancy

Ob: Design & System Obsolescence

En: Enforcement

** Rating

A: Acceptable N: Not Inspected/Rated Ob: Design & System Obsolescence

A: Acceptable C: Corrected Ob: Design & System Obsolescence

En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	17.64	Rating **	М	Issue No.		69		
LM End	17.64	Issue Type +	Ma	Location *	LS			
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Category				Start		End		
Item	Slope Sta	bility		39.3991	64°	39.399164°		
item	-121.805787 ° -121.80578							
DWR ID DWR_MA0013_02_f _ 2016_69								
		Comn	nent Cod	de				
S1 : Repai	ir slope ins	tability.						
		Inspecto	or Comm	nent				

Photo 1 of 1: FA_2018_MA0013_301_69_20180905_00018.jpg



View of slope instability issue along the landside slope.

LM Start	17.90	Rating **	М	Issue No.		70
LM End	17.90	Issue Type +	Ma	Location *		LS
Category	Earthen Levee GPS Latitu			titud	le/Longitude	
Calegory		Start		End		
Item	Animal Co	ontrol	39.39680)9°	39.396809°	
пеш				-121.80942	22 °	-121.809422°
DWR ID	DWR_MA0013_02_f _ 2016_70					

Comment Code

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment



View of the rodent holes along the landside slope.

LM Start	17.93	Rating **	М	Issue No.		71			
LM End	17.93	Issue Type +	Ma	Location *	LS				
Category	Catagory Earthen Levee					GPS Latitude/Longitude			
Calegory	Category					End			
Item	Animal Co	ontrol		39.39646	65 °	39.396465 °			
пеш				-121.80993	35 °	-121.809935 °			
DWR ID DWR_MA0013_02_f _ 2016_71									
	Comment Code								

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment



View of the rodent holes along the landside slope.

Location + Issue Type Ma : Maintenance Deficiancy LS: Land Side N/A: Not Applicable : Acceptable : Minimally Acceptable N : Not Inspected/Rated WS: Water Side C : Corrected Ob : Design & System Obsolescence A/W : Acceptable but Monitor & Maintain U : Unacceptable En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	18.16	Rating **	A/W	Issue No.		945		
LM End	18.16	Issue Type +	Ма	Location *				
Category	ental	GPS La	GPS Latitude/Longitude					
Calegory			Start		End			
Item	DWR UCI	P LMA Respo	nsibility	39.3944	06 °	39.394406°		
пеш				-121.8131	80°	-121.813180°		
DWR ID 16379								
	Comment Code							

Inspector Comment

FS_ID:52161 DS_ID:16379 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 5/30/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/26/2016 Crossing appears to be in good

condition.6/30/2015 Vegetation still present WS. LS side was underwater during inspection.5/28/2014 Same as last

inspection.12/4/2013 Same as last inspection.7/08/2013 LS slope cleared of vegeatation and is in good condition. WS is still vegetated. LS pipe end under water and blocked off by plywood so unable to measure culvert size.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0134 for unknown culvert size on LS and no outlet visible on WS.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 13.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 18.37)]

FS Date: 6/8/2017 10:18:47 AM

LM Start	18.16	Rating **	A/W	Issue No.	945 (cont)
LM End	18.16	Issue Type +	Ма	Location *	

Photo 1 of 3: UCIP_FA_2018_52161_67387.jpg

Overview of crossing looking D/S at left bank of Cherokee Canal.



View of WS slope and berm.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	18.16	Rating **	A/W	Issue No.		945 (cont)			
LM End	18.16	Issue Type +	Ма	Location *					
Category	Supplemental				GPS Latitude/Longitude				
Category	alegory					End			
Item	DWR UCI	P LMA Respo	nsibility	39.39440	6°	39.394406°			
пеш				-121.81318	o°	-121.813180°			
DWR ID 16379									
	Comment Code								

Inspector Comment

FS_ID:52161 DS_ID:16379 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 5/30/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/26/2016 Crossing appears to be in good

condition.6/30/2015 Vegetation still presenton WS. LS side was underwater during inspection.5/28/2014 Same as last

inspection.12/4/2013 Same as last inspection.7/08/2013 LS slope cleared of vegeatation and is in good condition. WS is still vegetated. LS pipe end under water and blocked off by plywood so unable to measure culvert size.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0134 for unknown culvert size on LS and no outlet visible on WS.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 13.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 18.37)] FS Date: 6/8/2017 10:18:47 AM

Photo 3 of 3: UCIP_FA_2018_52161_67390.jpg



View of flap gate located on WS.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	19.92	Rating **	М	Issue No.		946	
LM End	19.92	Issue Type +	Ма	Location *			
Category	Suppleme	Supplemental			GPS Latitude/Long		
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.37819	3°	39.378198°	
пеш					°	-121.838570°	
DWR ID	16375						

Comment Code

Inspector Comment

FS_ID:52164 DS_ID:16375 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 Erosion still present at WS headwall. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Erosion still present at WS headwall. (DWR Sutter Yard- AFreitag)4/26/2016 Erosion still present behind the WS headwall. The rest of the crossing appears in good condition.6/30/2015 Erosion still present behind the WS headwall. Everything thing else with the crossing appeared to be in good condition.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.7/08/2013 Erosion problem same as last inspection. WS and LS slopes have been cleared of vegetation and are in good shape.4/24/2012 Erosion present behind WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13.1 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 20.15)] FS Date: 6/8/2017 10:23:50 AM

LM Start	19.92	Rating **	М	Issue No.	946 (cont)
LM End	19.92	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_FA_2018_52164_67401.jpg



Erosion behind WS headwall looking at the downstream edge of headwall.

Photo 2 of 3: UCIP_FA_2018_52164_67400.jpg



Erosion behind WS headwall at the upstream edge of headwall.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	19.92	Rating **	М	Issue No.		946 (cont)	
LM End	19.92	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory		Start		End			
Item	DWR UCI	onsibility	39.378198	°	39.378198	0	
item				-121.838570	°	-121.838570	0
DWR ID	16375						

Inspector Comment

Comment Code

FS_ID:52164 DS_ID:16375 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 Erosion still present at WS headwall. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Erosion still present at WS headwall. (DWR Sutter Yard- AFreitag)4/26/2016 Erosion still present behind the WS headwall. The rest of the crossing appears in good condition.6/30/2015 Erosion still present behind the WS headwall. Everything thing else with the crossing appeared to be in good condition.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.7/08/2013 Erosion problem same as last inspection. WS and LS slopes have been cleared of vegetation and are in good shape.4/24/2012 Erosion present behind WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13.1 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 20.15)] FS Date: 6/8/2017 10:23:50 AM

Photo 3 of 3: UCIP_FA_2018_52164_67402.jpg



Flap gate located on the WS.

LM Start	20.43	Rating **	М	Issue No.		6	
LM End	20.74	Issue Type +	Ma	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory						End	
Item	Trim / Thi	n Trees	39.3730	91°	39.370795°		
item				-121.8452	25 °	-121.850124°	
DWR ID	DWR_MA0013_02_s _ 2013_6						
Comment Code							

T1 : Trim trees to at least five feet above ground level.

Inspector Comment



View of the overgrown trees along the landside slope.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy Ob: Design & System Obsolescence C: Corrected U: Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	20.52	Rating **	М	Issue No.		73		
LM End	20.52	Issue Type +	Ма	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory						End		
Item	Encroachments			39.3724	86°	39.372486 °		
item			-121.8465	37°	-121.846537°			
DWR ID	WR ID DWR_MA0013_02_f _ 2016_73							
Comment Code								
TR : Tree	or limb							
			_					
Inspector Comment								
Remove the tree limbs from the landside slope and toe.								



View of the tree limbs along the landside levee toe.

LM Start	20.65	Rating **	М	Issue No.		52
LM End	20.65	Issue Type +	Ма	Location *		LS
Category	evee	GPS Latitude/Longitude				
Calegory				Start		End
Encroachments Item				39.3714	33°	39.371433°
пеш			-121.8487	53°	-121.848753°	
DWR ID	DWR_MA0	013_02_s _ 201	4_52			

Comment Code

TR: Tree or limb

Inspector Comment

Remove the tree limbs from the landside slope and toe.

Photo 1 of 1 : FA_2018_MA0013_301_52_20180905_00011.jpg
108708740,03

View of the tree limbs along the landside toe.

	LM Start	20.74	Rating **	N	Issue No.		74			
	LM End	20.74	Issue Type +	Ma	Location *		LS			
	Category Earthen Levee				GPS Latitude/Longitude					
	Category				Start		End			
	Item Trim / Thin Trees			39.370796°		39.370796	0			
					-121.8501	24°	-121.850124	0		
	DWR ID DWR_MA0013_02_f _ 2016_74									
	Comment Code									
	T5: Tree stumps.									

CR : Crown

Inspector Comment

No Photos

^ Location	
LS: Land Side	N/A: Not Applicable
WS · Water Side	

Thursday, December 27, 2018 09:13

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

A/W : Acceptable but Monitor & Maintain

+ Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	20.77	Rating **	М	Issue No.		75		
LM End	20.77	Issue Type +	Ma	Location *		WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Erosion /	Bank Caving		39.3706	41°	39.370641 °		
пеш				-121.8505	72°	-121.850572°		
DWR ID DWR_MA0013_02_f _ 2016_75								
Comment Code								
E1 : Note a	and monito	or erosion site						
Inspector Comment								



View of the erosion along the waterside toe.

LM Start	21.03	Rating **	М	Issue No.		68	
LM End	21.03	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory						End	
Item	, Animal Control			39.3686	82°	39.368682°	
пеш				-121.8548	17°	-121.854817°	
DWR ID	DWR ID DWR_MA0013_02_s _ 2018_68						
Comment Code							

A1: Exterminate rodents and backfill and compact or grout burrows.

Inspector Comment

Repair the rodent holes along the landside slope.

Photo 1 of 1 : FA_2018_MA0013_301_68_20180905_00017.jpg



View of the rodent holes along the landside slope.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	21.35	Rating **	М	Issue No.		950		
LM End	21.35	Issue Type +	Ма	Location *				
Catagony	Suppleme	ental		GPS La	atitud	le/Longitude		
Category				Start		End		
Item	DWR UCI	nsibility	39.3661	55 °	39.366155°			
item				-121.8598	80°	-121.859880°		
DWR ID	16384							
Comment Code								

Inspector Comment

FS_ID:52168 DS_ID:16384 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 Pipe section that crosses through the levee appears to be in good condition. (DWR Sutter Yard - AFreitag)4/26/2016 Pipe appears to have been repaired. Not sure on the extent of the repairs or if they were approved by the Central Valley Flood Control Board.6/30/2015 Pipe is currently undergoing repairs. Not sure what all is planed to be fixed but will update the photos and inspection report with new details when its completed.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Pipe appears to have been repaired. Need to talk to inspections and supervisor to find out more deatils on repair.4/24/2012 Needs repair. Internal piping, severe corrosion. Debris present--rusted pipe stockpiled on LS slope. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13E_2011_p_0234 for no WS gate but sluice gate present.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.2 feet below the crown. Crossing penetrates levee at angle. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Pipe crosses the channel. Corroded section of existing pipe, 9-foot and 8-inch of an 18-inch corrugated metal pipe section, was replaced under Permit 7231 prior to 1974. (Permit No. 7231, 1960 - Estate of Walter L. King) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.60)]

FS Date: 6/8/2017 10:33:29 AM



Overview of crossing looking downstream.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	21.35	Rating **	М	Issue No.		950 (cont)			
LM End	21.35	Issue Type +	Ma	Location *					
Category	Supplemental				atitud	le/Longitude			
Calegory				Start		End			
Item	DWR UCI	nsibility	39.3661	55 °	39.366155°				
пеш				-121.8598	80°	-121.859880°			
DWR ID	16384	16384							
Comment Code									

Inspector Comment

FS_ID:52168 DS_ID:16384 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 Pipe section that crosses through the levee appears to be in good condition. (DWR Sutter Yard - AFreitag)4/26/2016 Pipe appears to have been repaired. Not sure on the extent of the repairs or if they were approved by the Central Valley Flood Control Board.6/30/2015 Pipe is currently undergoing repairs. Not sure what all is planed to be fixed but will update the photos and inspection report with new details when its completed.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Pipe appears to have been repaired. Need to talk to inspections and supervisor to find out more deatils on repair.4/24/2012 Needs repair. Internal piping, severe corrosion. Debris present--rusted pipe stockpiled on LS slope. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13E_2011_p_0234 for no WS gate but sluice gate present.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.2 feet below the crown. Crossing penetrates levee at angle. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Pipe crosses the channel. Corroded section of existing pipe, 9-foot and 8-inch of an 18-inch corrugated metal pipe section, was replaced under Permit 7231 prior to 1974. (Permit No. 7231, 1960 - Estate of Walter L. King) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.60)]

FS Date: 6/8/2017 10:33:29 AM



View of WS daylight. Hole present at pipe daylight.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	21.35	Rating **	М	Issue No.		950 (cont)			
LM End	21.35	Issue Type +	Ma	Location *					
Category	Suppleme	GPS La	tituc	le/Longitude					
Calegory				Start		End			
Item	DWR UCI	nsibility	39.3661	55 °	39.366155°				
пеш				-121.8598	30°	-121.859880°			
DWR ID	16384	16384							
Comment Code									

Inspector Comment

FS_ID:52168 DS_ID:16384 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 Pipe section that crosses through the levee appears to be in good condition. (DWR Sutter Yard - AFreitag)4/26/2016 Pipe appears to have been repaired. Not sure on the extent of the repairs or if they were approved by the Central Valley Flood Control Board.6/30/2015 Pipe is currently undergoing repairs. Not sure what all is planed to be fixed but will update the photos and inspection report with new details when its completed.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Pipe appears to have been repaired. Need to talk to inspections and supervisor to find out more deatils on repair.4/24/2012 Needs repair. Internal piping, severe corrosion. Debris present--rusted pipe stockpiled on LS slope. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13E_2011_p_0234 for no WS gate but sluice gate present.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.2 feet below the crown. Crossing penetrates levee at angle. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Pipe crosses the channel. Corroded section of existing pipe, 9-foot and 8-inch of an 18-inch corrugated metal pipe section, was replaced under Permit 7231 prior to 1974. (Permit No. 7231, 1960 - Estate of Walter L. King) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.60)]

FS Date: 6/8/2017 10:33:29 AM



WS-view of internal pipe with severe corrosion-holes present along pipe

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence
En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	21.83	Rating **	М	Issue No.	951			
LM End	21.83	Issue Type +	Ма	Location *				
Category	Suppleme	ental		GPS La	atituc	le/Longitude		
Calegory				Start		End		
Item	DWR UCI	nsibility	39.3623	78°	39.362378°			
item				-121.8673	50°	-121.867350°		
DWR ID	16394							
Comment Code								

Inspector Comment

FS_ID:52170 DS_ID:16394 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 WS flap gate showing signs of rusting and detioration but still appears to be able to function properly. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 WS flap gate is really rusted and deteriorated but it appears to still function properly. (DWR Sutter Yard - AFreitag)4/26/2016 WS flap gate is really rusted and deteriorated. May need to be replaced. The rest of the crossing appeared in good condition.6/30/2015 Crossing is in good condition. No noticeable issues to be reported.5/28/2014 Same as last inspection.12/4/2013 WS ans LS slopes are in good condition.7/08/2013 Same as last inpsection.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0251 for no outlet visible on WS. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). Rusted gate located on the WS (gate stuck). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 22.08)] FS Date: 6/8/2017 10:37:02 AM

LM Start	21.83	Rating **	М	Issue No.	951 (cont)
LM End	21.83	Issue Type +	Ма	Location *	



Overview of crossing looking upstream at the left bank of Cherokee Canal.



View of WS headwall.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	21.83	Rating **	М	Issue No.	951 (cont)		
LM End	21.83	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS Lat	ituc	le/Longitude	
Calegory				Start		End	
Item	DWR UCI	IP LMA Respo	nsibility	39.36237	8°	39.362378	۰
item				-121.86735	o°	-121.867350	0
DWR ID	16394						

Comment Code

Inspector Comment

FS_ID:52170 DS_ID:16394 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 WS flap gate showing signs of rusting and detioration but still appears to be able to function properly. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 WS flap gate is really rusted and deteriorated but it appears to still function properly. (DWR Sutter Yard - AFreitag)4/26/2016 WS flap gate is really rusted and deteriorated. May need to be replaced. The rest of the crossing appeared in good condition.6/30/2015 Crossing is in good condition. No noticeable issues to be reported.5/28/2014 Same as last inspection.12/4/2013 WS ans LS slopes are in good condition.7/08/2013 Same as last inpsection.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0251 for no outlet visible on WS. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). Rusted gate located on the WS (gate stuck). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 22.08)] FS Date: 6/8/2017 10:37:02 AM

Photo 3 of 3: UCIP_FA_2018_52170_67461.jpg



Flap gate located on WS.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	22.15	Rating **	М	Issue No.		953	
LM End	22.15	Issue Type +	Ma	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory	Category		Start		End		
Item	DWR UCIP LMA Responsibility			39.35982	7°	39.359827	0
пеш				-121.87230	0°	-121.872300	0
DWR ID	16391						

Inspector Comment

Comment Code

FS_ID:52175 DS_ID:16391 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 Location of LS inlet still unknown. Need to trace with utility locator/GPR to find. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 Unable to locate LS pipe end. Ws appears to be in good condition. (DWR Sutter Yard -

AFreitag)4/26/2016 Still unable to locate the LS headwall and end of pipe. Pipe is still being used. Pipe was draining to WS.6/30/2015 Still unable to locate the LS headwall and pipe end.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection. Unable to locate LS headwall.4/24/2012 Unable to locate LS headwall. Need photo of LS headwall during next inspection. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 15.3 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. This pipe runs on an angle through the levee, then underground along the LS slope to historic levee mile (HLM) 22.39 where it enters a ditch on the LS. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 22.41)] FS Date: 6/8/2017 10:42:36 AM

LM Start	22.15	Rating **	М	Issue No.	953 (cont)
LM End	22.15	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_FA_2018_52175_67498.jpg



View of WS slope looking from WS headwall to levee crown.

Photo 2 of 3: UCIP_FA_2018_52175_67496.jpg



View of WS slope looking from WS headwall to levee crown.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	22.15	Rating **	М	Issue No.		953 (cont)	
LM End	22.15	Issue Type +	Ма	Location *			
Supplemental			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	DWR UCIP LMA Responsibility			39.35982	27°	39.359827°	
item				-121.87230	00°	-121.872300°	
DWR ID	16391					·	

Inspector Comment

Comment Code

FS_ID:52175 DS_ID:16391 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 6/8/2017 10:42:36 AM

UCIP Comments: 5/30/2017 Location of LS inlet still unknown. Need to trace with utility locator/GPR to find. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 Unable to locate LS pipe end. Ws appears to be in good condition. (DWR Sutter Yard -

AFreitag)4/26/2016 Still unable to locate the LS headwall and end of pipe. Pipe is still being used. Pipe was draining to WS.6/30/2015 Still unable to locate the LS headwall and pipe end.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection. Unable to locate LS headwall.4/24/2012 Unable to locate LS headwall. Need photo of LS headwall during next inspection. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 15.3 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. This pipe runs on an angle through the levee, then underground along the LS slope to historic levee mile (HLM) 22.39 where it enters a ditch on the LS. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 22.41)]

Photo 3 of 3: UCIP_FA_2018_52175_67497.jpg



View of flap gate on WS.

LM Start	22.33	Rating **	A/W	Issue No.		62	
LM End	22.33	Issue Type +	Ma	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory	egory			Start		End	
Item	Slope Sta	e Stability		39.358419°		° 39.358419°	
пеш			-121.8750	88°	-121.875088 °		
DWR ID DWR_MA0013_02_s _ 2016_62							
Comment Code							
S1 : Repai	r slope ins	tability.					

Inspector Comment

Photo 1 of 1 : FA_2018_MA0013_301_62_20180905_00014.jpg



View of slope instability issue along the landside slope.

* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

** Rating
A: Acceptable
N: Not Inspected/Rated
M: Minimally Acceptable
C: Corrected
D: Unacceptable
AW: Acceptable
AW: Acceptable but Monitor & Maintain

** Rating
A: Issue Type
Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement